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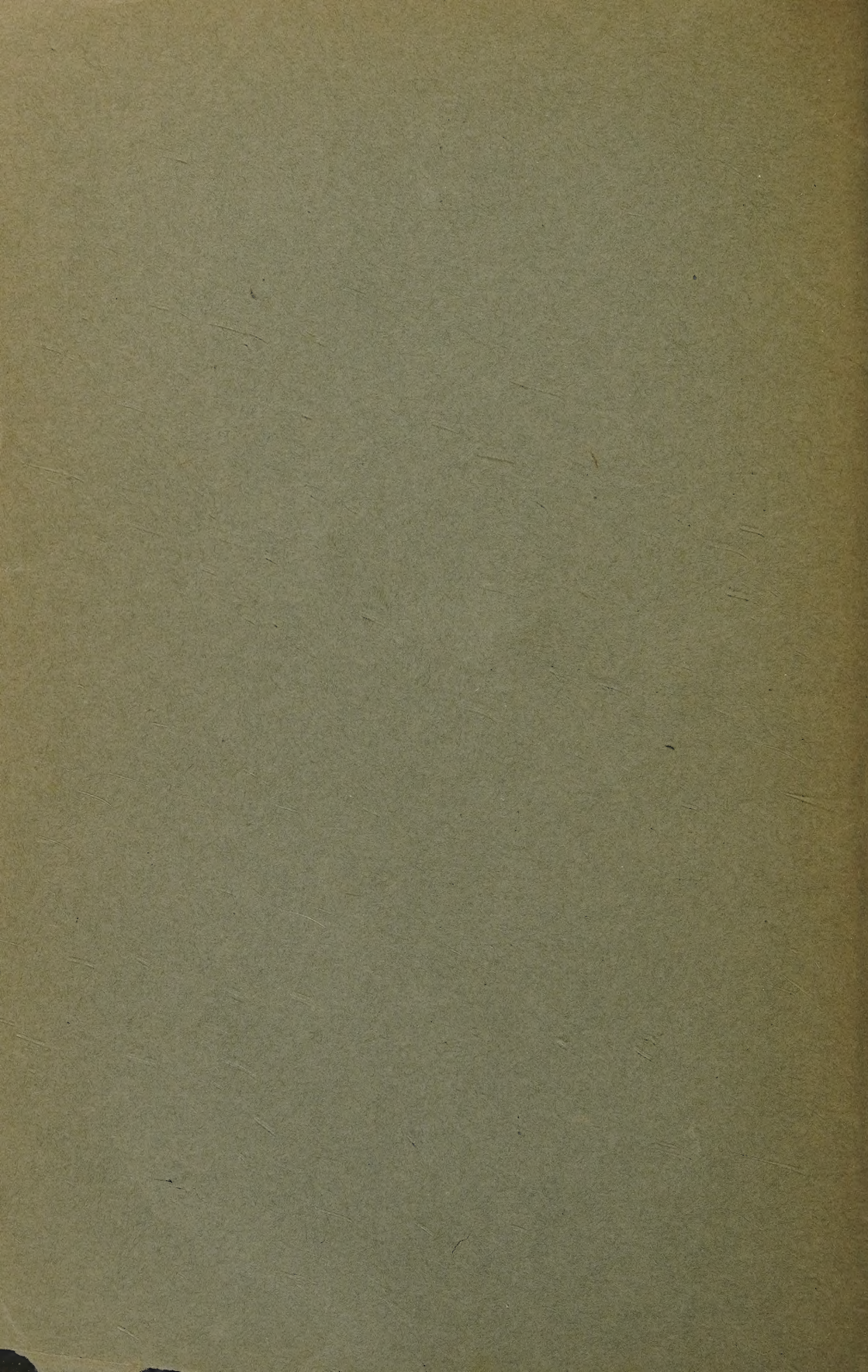
GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

APRIL, 1939.



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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

April, 1939

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MINISTRY OF AGRICULTURE

MONTHLY REPORT

APRIL, 1939.

The recent improved weather has kept farmers busy in the fields, and good progress is being maintained with spring work. As indicated in the account of the agricultural conditions at the beginning of this month, ploughing and other work entailed in the preparation of the ground for the reception of seed is backward, and it is hoped that April will continue favourable so that tillage farming may be brought up-to-date in most areas. According to reports of sales of seeds the likelihood of an increase in the area under tillage crops may be realised if the weather permits. While it may be difficult to reconcile the intentions of some farmers to increase their acreages under crops that have been selling at low prices, it does not always follow in farming that a year of disappointing crop prices is followed by one of decreased production, and there are particularly good reasons to suggest to farmers the desirability of growing more foodstuffs at this time. The long view is certainly what is needed now, and even if next year's prices do not recover to remunerative levels, the assistance given by the Government for the grain crops, together with that indirectly obtained through the production of better beef and dairy cattle and pigs, will help to a marked extent.

AGRICULTURAL CONDITIONS.

AGRICULTURAL CONDITIONS AT 1st APRIL, 1939.

With the continuance of unsettled weather during the greater part of March, progress with spring work was retarded, and it is estimated that it is now from a fortnight to a month behind that of a normal season. Heavy rains, sometimes accompanied by strong winds, were experienced on many days, and cold spells were also frequent. Occasionally there were slight falls of hail and sleet and some ground frosts. During intervening dry periods temperatures rose to seasonally high levels, but generally speaking the month was cold and wet.

Some progress was made with ploughing and the preparation for seed sowing, but the damp ground conditions continued to hamper this work on most farms, and it is still very backward for the time of year. In the closing days of the month, when the weather and the soil conditions again improved, there was a general effort made in tackling the arrears of field work. Some spring wheat was sown during favourable intervals at the beginning of March, and later some progress was made with the sowing of oats and the planting of early varieties of potatoes in early districts. Farmers also took advantage of the opportunities to make applications of lime and basic slag in many areas, and rather more of this work was done than previously this season, more especially in regard to liming.

The bareness of pastures is a further reflection of the unfavourable weather; although a little growth was made during the spells of milder weather, the excessive rains, together with the cold winds, checked the spring of grass, and there is, as yet, very little new growth on the pastures.

With the limited amount of grass so far available there was a fairly heavy drain on stocks of home-grown foods. On most farms hay and straw remain in fairly plentiful supply, and while the quality may be of a lower standard than usual in many cases, the general position in regard to fodder is reasonably satisfactory. Roots, however, have been scarce; turnips kept badly this year, and supplies are now almost exhausted, but some farmers have been fortunate in that they have been able to draw on fairly good stocks of mangels to make good the shortage of turnips. Purchased cakes and meals were readily obtainable throughout the month at prices which had a slight downward tendency, but bran advanced in price following a local shortage of supply in some cases.

Livestock remained in good health, and seasonal outbreaks of the usual forms of disease have generally been slight. Cattle, as a rule, were comparatively trouble-free, only a few slight outbreaks of liver fluke disease and the usual troubles experienced at calving time being reported. Attacks of

“foot-rot” and “liver fluke” diseases were, however, rather more prevalent among some flocks of sheep where the owners neglected to take the necessary preventive measures. Lambing continued satisfactory throughout the month of March, and a good crop has so far been obtained. The rate of mortality among ewes and lambs was generally about normal.

Trade for livestock during March showed some further improvement for fat cattle, and this had favourable reactions for stores towards the end of the month when an upward trend of prices became evident for good strong animals.

THE CROPS.

WHEAT.—On many farms the inclement weather and consequent unfavourable soil conditions resulted in little or no winter wheat being sown, and in consequence there has been a noticeable tendency for growers to sow a larger area under spring wheat this season, and further progress was made in that direction during the early part of last month. It is, however, not to be expected that this will offset the decrease in the acreage under winter wheat, and further reports tend to confirm previous statements to the effect that the total area under wheat this year will be considerably less than in 1938. Although some very thin brairds have been seen, the general condition and progress are quite satisfactory in most districts.

The threshing of the old crop has now been completed, and final reports indicated that yields and quality were generally up to average. Prices for the small quantities of grain marketed during March ranged from 5/3d. to 6/3d. per cwt. Seed prices are included in the table on page 773.

OATS.—Little progress has been made as yet in the sowing of this crop, except in a few of the earlier districts. Rather conflicting reports have been received regarding the probable area of this year's oat crop. In many localities farmers, anticipating increased subsidy payments, are intending to increase the area under oats, provided the difficulties and delays in the work of cultivation caused by bad weather can be overcome. As a general rule less lea land has been ploughed for oats than a year ago, but on the other hand there may be more fields than usual of oats following oats. On the whole, therefore, it seems probable that the area under oats will be somewhat similar to that in 1938.

Last year's crop has now nearly all been threshed and the latest reports continued to show that yields and quality have been generally fairly satisfactory.

Supplies of grain marketed during March were somewhat reduced, and prices eased to around 5/8d. per cwt. Quotations for seed oats at 1st April are shown in the table on page 773.

Oat straw was marketed in reduced quantities, and the price for the month was 10d. below the February figure at 41/- per ton.

BARLEY.—In districts where barley growing has been fairly successful in past seasons the acreage under this crop is expected to show an increase, and farmers are becoming more appreciative of the value of the grain for feeding to pigs; the increased subsidy provides further encouragement to growers. In a number of districts, however, the crop has given poor results in recent years, and farmers have come to regard it as an unprofitable venture and, therefore, do not feel inclined to extend its cultivation. The lateness of general farm work, and the inability to have much liming done, have also militated against the likelihood of any considerable increase in the amount of barley to be sown this season. It is, however, expected that taken all over the acreage under this crop will be at least as large as it was last year.

The threshing of the 1938 crop has finished, and the results have been generally satisfactory. Little of the grain has been marketed. Prices for small quantities of feeding barley ranged from 6/- to 6/6d. per cwt. during the month of March. The prices of barley for seed are given in the table on page 773.

FLAX.—In most districts an increase in the acreage under flax seems likely as considerable quantities of seed have already been purchased. Much interest has recently been taken in this crop, and it is probable that sowing will be made in some districts where it has not been grown in recent years.

Supplies at markets decreased rapidly during March, and the prices which ranged from 7/6 to 11/- per stone of 14 lbs., were on average 10½d. below the February level at 9/3¼d. per stone.

Quotations for flax seed are shown in the table on page 773.

POTATOES.—In most areas there is still a small proportion of the crop to be lifted, and it is generally considered that this will become a total loss. The damage done by frost and water-logged conditions is estimated to be unusually heavy in most areas.

With supplies plentiful the shipping demand remained quiet during the first three weeks of the month, but in the last week there was a considerable improvement in the trade, and larger quantities of the principal varieties were bought for shipment at considerably improved rates. The following figures illustrate this movement:—

SHIPMENTS TO GREAT BRITAIN.

Week ended	Tons	Week ended	Tons
4th March, 1939	2,782	5th March, 1938	6,741
11th " "	3,048	12th " "	6,440
18th " "	3,287	19th " "	6,198
25th " "	4,754	26th " "	5,059
1st April, "	5,219	2nd April, 1938	5,398

PRICES OF POTATOES.

The following prices per ton were paid by shipping merchants to growers during the week ended 1st April, 1939.

WARE.

Variety	Bagged.			Loose.		
Up-to-Date	£3	0	0 to	£3	5	0
Arran Banner	£2	10	0	£3	2	6
Arran Victory	£2	15	0	£3	5	0
Kerr's Pink	£3	0	0	£3	12	6
Majestic	£3	0	0	£3	7	6

SEED.

Majestic	£3	0	0
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Potatoes marketed for local consumption during March were slightly increased in quantity, and prices, which eased slightly during the month, recovered sharply in the last week following a marked improvement in the shipping trade. The monthly average price of 2/10½d. per cwt. for all classes was, however, 2d. lower than for the previous month.

There appears to be no likelihood of a general shortage of seed potatoes except, perhaps, in the case of a few of the first early varieties, but in some districts supplies of sound seed are rather difficult to obtain. The varieties chiefly in request for shipment last month were Up-to-Date, Majestic, Kerr's Pink, King Edward, Dunbar Standard, Arran Banner and Arran Pilot. The demand for seed of healthy, pure stocks was brisk. On the whole growers were well able to cope with the demand, but in some districts Up-to-Date, Arran Banner and Arran Pilot were scarce. A noteworthy feature is that the demand for seed is generally better than it was last season, and this is particularly true in the case of "healthy stock". Prices ruling for seed of some of the principal varieties are given in the table on page 773.

MANGELS.—As a rule the roots have kept well, and supplies have proved of great value for stock feeding in replacing turnips, which were destroyed by the severe frosts. Mangels are now being generally fed to cattle, and where they are not available farmers have been obliged to use treacle to make up for the shortage of roots.

HAY.—With pastures continuing bare of grass in most areas there was a further drain on stocks of hay, but there are still adequate supplies available on most farms.

Slightly increased quantities were marketed during March, and the average prices obtained were a shade lower than in February at 60/2d. per ton for Upland hay, and 44/1d. for Meadow hay, much of which was reported to be of low quality.

Decreasing quantities of rye grass seed were marketed last month at cheaper rates, averaging 19/1½d. per cwt. for Italian and 16/10½d. for Perennial. Retail cash prices of grass seeds at 1st April are shown on page 773.

LIVE STOCK.

CATTLE.—The health of store cattle remained satisfactory, and although a number of cases of fluke have been reported, outbreaks of disease generally have been less troublesome than in recent years. “Hoose” in particular is less prevalent than might have been expected. The inclement weather, and the scarcity of good grass have, however, been felt, and many of the outlying cattle are in low condition. There appears to be a growing tendency to go in more for beef production, and the trade in store cattle has, accordingly, been somewhat reduced.

Supplies of store cattle at Northern Ireland fairs during March were generally of small to medium dimensions, but quality was variable and trade ruled slow. The best sorts were limited in number and in fair request at quotations similar to those current a month ago, whilst inferior types, which were in the majority, were difficult to sell and slightly cheaper.

Dairy cattle, also, have been maintained in good health; sterility and abortion appeared to be less prevalent than usual, and calving has been about normal. Condition generally is fair, but some cattle are rather thin.

The offerings of dairy stock at fairs were smaller than in February, and quality was not up to the usual standard. The demand was poor, except for high class animals, and price movements generally favoured buyers.

SHEEP.—The condition and health of the flocks are about normal, but where hand feeding was not done sheep are lambing down in rather poor condition. “Foot rot” has been rife amongst some flocks, while “fluke” has claimed some victims. On the whole, however, “fluke” has been kept well in check by preventive measures.

Lambing is now well advanced in most areas. The results have been highly satisfactory, and there has been quite a good proportion of twins. In general, the mortality rate among the breeding flocks has not been above normal, but cases of high death rates amongst lambs, caused by their dams being affected by “fluke” and of having a shortage of milk have been reported.

The numbers of sheep and lambs exposed for sale at fairs last month were small and included many barren ewes. A fairly good demand was experienced for good fat animals, and prices for these were steady.

PIGS.—Young pigs were offered in the usual numbers, and trade was moderate at unchanged rates. Supplies of fattening pigs were about average and recent prices remained unchanged. Brood sows were in normal supply and in steady request at slightly easier rates of from £5 to £12 per head, according to type and quality.

Dead pigs were marketed in steady numbers, and the supply was generally adequate for the firm demand created by the curers engaged in the roll and ham trade.

The weekly returns of (1) shipments of live pigs to Great Britain, and (2) purchases of dead and live pigs in Northern Ireland last month are compared hereunder, with corresponding details for 1938 in brackets.

Week ended	(1) Shipments to Great Britain.		(2) Bought dead and alive for curing in Northern Ireland.				Total	
			Dead		Alive			
11/3/39	949	(1,522)	8,437	(8,068)	6,273	(3,134)	15,659	(12,724)
18/3/39	910	(1,331)	8,145	(8,360)	5,875	(3,095)	14,930	(12,786)
25/3/39	1,381	(1,598)	7,787	(8,710)	5,643	(2,915)	14,811	(13,223)
1/4/39	952	(1,576)	7,684	(8,233)	5,199	(2,918)	13,835	(12,727)
13 weeks ended 1/4/39	13,353	(27,886)	104,302	(110,268)	72,276	(34,884)	189,931	(173,038)

HORSES.—Trade for farm horses remained dull, but actual prices showed little change from those ruling in recent months. Good working horses realised from £20 to £45 per head, while older animals fetched from £10 to £30 according to quality. Unbroken colts made from £15 to £30, and foals from £9 to £17 per head. The numbers offered for sale were generally up to average dimensions.

MILK.—The scarcity of roots and the rather poor quality of much of the hay and straw have tended to keep milk yields below normal in some districts, but they are now showing a general improvement, and it is estimated that the quantities of milk available during March increased to a considerable extent.

The prices paid by creameries during March were similar to those ruling in February, and ranged from 4½d. to 6d. per gallon for milk delivered, the separated milk being returned to the farmer. The rate of equalisation payment in accordance with the Milk and Milk Products Acts (Northern Ireland), 1934 to 1938, for milk produced in Northern Ireland and delivered to the creameries for manufacturing purposes has been determined at 0.21d. per gallon for the month of February, 1939. (N.B.—The figure of 0.17d. per gallon quoted in last month's report was for the month of January, 1939, and not for February as stated).

It should be noted that under the regulations creameries are required to distribute the equalisation payment in accordance with the butter-fat content of the milk received from each supplier.

MINISTRY OF LABOUR RETAIL PRICES AND INDICES.

At March 1st the general level of retail prices of food in Great Britain and Northern Ireland, as ascertained by the Ministry of Labour, was 35 per cent. above the level of July, 1914, as against 38 per cent. at February 1st and 40 per cent. a year ago. The fall in the index was chiefly due to marked reductions in the prices of eggs.

The following table shows the average retail prices of certain foods in large towns and villages on March 1st, 1939, February 1st, 1939, and March 1st, 1938, with the corresponding increases over July, 1914.

Article.	Mar. 1st, 1939	Feb. 1st, 1939.	Mar. 1st, 1938.	Increase over July, 1914.		
				Mar. 1st, 1939.	Feb. 1st, 1939.	Mar. 1st, 1938.
	Per lb. s. d.	Per lb. s. d.	Per lb. s. d.	Per cent.	Per cent.	Per cent.
Beef, British—						
Ribbs	1 2½	1 2½	1 2½	43	43	47
Thin Flank	0 7½	0 7½	0 7½	14	15	19
Beef, Chilled or Frozen—						
Ribbs	0 9½	0 9½	0 9½	31	32	34
Thin Flank	0 5	0 5	0 5	2	2	5
Mutton, British—						
Legs	1 3½	1 3½	1 4½	47	46	56
Breast	0 7½	0 7½	0 8	15	16	24
Mutton, Frozen—						
Legs	0 10½	0 10½	0 10½	50	50	52
Breast	0 4	0 4	0 4½	Nil	Nil	4
Bacon (Streaky)	1 3½	1 3½	1 3½	36	36	36
Butter—Fresh	1 5	1 5	1 4½	17	16	14
Salt	1 3½	1 3½	1 3	11	11	6
Cheese	0 10½	0 10½	0 11	24	25	27
Milk	Per qt. 0 6½	Per Qt. 0 6½	Per Qt. 0 6½	95	95	94
Eggs (Fresh)	Each 0 1½	Each 0 2	Each 0 1½	18	59	32
Bread	Per 4 lb. 0 8½	Per 4 lb. 0 8½	Per 4 lb. 0 9½	46	47	63
Flour	Per 7 lb. 1 1½	Per 7 lb. 1 2	Per 7 lb. 1 4	31	31	51
Potatoes	0 5½	0 5½	0 6½	21	20	28

The cost of maintaining unchanged the pre-war standard of living of working-class families at March 1st was approximately 53 per cent. above the level of July, 1914, as compared with 55 per cent. at February 1st, and 56 per cent. at March 1st, 1938.

THE MARKETS DURING MARCH.

With the exception of cabbage, savoys, carrots and parsnips, supplies of the principal vegetables marketed during March were larger than in the previous month, and average prices generally were firmer. Supplies of cabbage marketed in Belfast were small for the month, but there were also fair supplies of pamphrey marketed at this centre. Pamphrey fetched from 1/- to 3/- per dozen, while the average quotation for cabbage was unchanged at 1/4d. per dozen. Savoys, marketed in Belfast and Portadown, also decreased in supply, and hardened in price by 3½d. to 1/5½d. per dozen, but cauliflowers at the former centre cheapened by 5½d. to 2/4½d. per dozen. Generally, leeks were ½d. dearer at 7½d., and parsley 2½d. dearer at 1/4½d. per bunch, whilst

garden turnips firmed by $\frac{1}{4}$ d. to $11\frac{1}{2}$ d. per cwt. Carrots also improved in price by $9\frac{1}{2}$ d. to $9/9\frac{1}{4}$ d., and parsnips by $1/2\frac{1}{4}$ d. to $7/6$ d. per cwt. In the provision markets supplies of farmers' butter were slightly increased on the month. Print butter was unchanged in price at $1/3\frac{1}{2}$ d. per lb., but lump was $\frac{1}{2}$ d. cheaper at $1/1\frac{1}{2}$ d. per lb. Hen and duck eggs continued to show seasonal increases in the quantities marketed, and prices as fixed by the Ministry from week to week followed the seasonal trend as shown in the table below. Supplies of hens and chickens in the poultry section were less numerous, but ducks were in slightly larger supply. Hens were $\frac{3}{4}$ d. cheaper at $1/8\frac{1}{4}$ d. each, but chickens at $2/9\frac{3}{4}$ d. each, and ducks at $2/5$ d. each were $2\frac{1}{4}$ d. and $1\frac{1}{4}$ d. dearer respectively. The prices per lb. live weight paid by wholesale merchants during the month were: spring chickens, 10d. to 11d.; winter chickens, 8d. to $10\frac{1}{2}$ d.; large chickens, 8d. to 9d.; hens and ducks, 5d. to 8d.

MARKETING OF EGGS ACTS (N.I.) 1924—1937.

The following table shows the prices fixed by the Ministry and payable by licensed wholesaler dealers for eggs purchased from producers during the weeks specified, as compared with the prices fixed for the corresponding weeks of 1938.

Week ended			1939				1938			
			Hen eggs per lb.*		Duck eggs per doz.*		Hen eggs per lb.		Duck eggs per doz.	
			s.	d.	s.	d.	s.	d.	s.	d.
March 4	...	...	0	6½	0	10	0	6½	1	0½
" 11	...	...	0	5½	0	9	0	6½	0	11½
" 18	...	...	0	5½	0	8	0	5½	0	10½
" 25	...	...	0	5½	0	9	0	5½	0	9
April 1	...	...	0	6	0	9½	0	5½	0	8

*When hen eggs are delivered by the producer to the packing store of a licensed whole-sale dealer of Class A an additional $\frac{1}{4}$ d. per lb. is payable; in the case of duck eggs an additional $\frac{3}{4}$ d. is payable for each complete dozen so delivered.

Payment on a quality basis came into operation during the week ended 5th March, 1938.

The following were the standard deductions :—

Hen Eggs : "Seconds" and soiled eggs $\frac{1}{4}$ d. per egg, rejects $\frac{3}{4}$ d. per egg.

Duck eggs : Rejects $\frac{3}{4}$ d. per egg.

LONDON EGG PRICES.

Return of average prices of eggs at London on Monday each week, furnished by the London Egg Exchange, and published in the Weekly Dairy Produce Notes of the Imperial Economic Committee :—

Hen Eggs, per 120.

Description	6/3/39	13/3/39	20/3/39	27/3/39
English, National Mark—				
(Specials) ...	12/-	10/3	11/3	11/9
(Standards) ...	10/6	9/9	10/6	11/-
(Mediums) ...	10/-	9/6	9/9	10/3
(Pullets) ...	9/6	9/3	9/3	9/3
Northern Ireland—				
(Extra Specials) ...	12/-	10/3 10/6	11/3 11/6	11/3 11/9
(Specials) ...	11/- 11/6	9/9	10/9 11/-	10/9 11/-
(Standards) ...	10/-	9/3	10/3 10/6	10/3 10/6
(Selected) ...	9/3 9/6	8/9 9/-	9/9 10/-	9/9 10/-

AGRICULTURAL INDEX NUMBERS.

MONTHLY INDEX NUMBERS OF PRICES OF INDIVIDUAL COMMODITIES.

(Corrected for Seasonal Variation).

(Base 1927-29 = 100).

Commodity	1939			1938						1937		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Mar.	Feb.	Jan.	Mar.	Feb.	Jan.
Cattle : Fat ...	†78	78	76	75	78	80	86	87	88	78	73	72
Store ...	87	90	91	91	89	89	101	96	93	81	82	80
Cows : Fat ...	63	60	64	60	64	64	75	77	77	66	60	61
Sheep & Lambs: Fat ...	62	59	53	52	44	59	63	66	59	61	59	61
Bacon Pigs ...	76	†80	82	90	94	92	79	83	86	76	78	86
Hens and Chickens ...	70	71	75	80	69	67	75	71	72	67	64	64
Ducks ...	95	91	93	98	95	97	87	79	72	88	81	72
Eggs ...	92	†74	103	79	84	90	85	92	92	98	90	69
Milk :												
For Manufacture	*	86	87	88	86	83	84	85	87	77	74	73
Whole ...	110	108	107	105	114	122	110	107	106	103	100	85
All ...	*	100	99	97	99	96	99	99	98	92	90	80
Farmers' Butter ...	76	77	77	75	74	76	80	81	82	63	64	63
Wool ...	*	57	60	57	58	57	61	63	83	91	84	82
Potatoes ...	95	93	100	79	77	83	67	67	66	127	119	118
Oats ...	76	74	74	74	72	73	93	97	97	88	88	84
Hay ...	77	78	79	77	78	77	73	77	78	90	86	83
Oat Straw ...	84	85	87	87	90	91	89	88	88	99	95	94
Flax ...	75	79	78	75	75	77	78	76	76	73	76	76
Grass Seed :												
Perennial ...	93	102	106	121	125	117	46	45	48	82	82	87
Italian ...	82	78	71	110	104	79	45	38	31	41	40	38
Mixed ...	94	*	72	100	93	80	*	33	43	*	59	67
All ...	92	104	101	128	117	97	54	48	47	67	63	69

Revised Index Numbers taking Account of Payments under the Cattle
Subsidy, the Wheat Act, and Government Payments for Milk.

Cattle : Fat ...	91	90	88	88	91	94	97	99	100	89	84	83
Milk :												
For Manufacture	*	108	119	107	115	120	108	102	102	92	88	89
All ...	*	108	112	106	115	121	109	105	104	98	96	87

* Not yet available. † Provisional.

MONTHLY INDEX NUMBERS OF PRICES OF INDIVIDUAL COMMODITIES.

(Uncorrected for Seasonal Variation).

(Base 1927-29 = 100).

Commodity	1939			1938						1937		
	Mar.	Feb.	Jan.	Dec.	Nov.	Oct.	Mar.	Feb.	Jan.	Mar.	Feb.	Jan.
Cattle : Fat ...	†80	79	77	74	70	72	88	89	90	81	75	74
Store ...	89	89	88	87	87	87	100	95	91	81	81	78
Cows : Fat ...	66	64	66	59	60	60	79	82	80	70	64	64
Sheep : Fat ...	69	62	51	48	40	52	70	68	59	68	61	60
Bacon Pigs ...	†82	83	83	82	84	85	87	86	86	85	82	84
Hens and Chickens ...	76	75	79	84	65	63	80	75	76	72	68	68
Ducks ...	95	91	96	109	95	96	85	79	75	87	82	75
Turkeys ...	*	—	83	93	75	—	—	—	80	—	—	67
Eggs ...	†57	67	106	111	143	129	55	84	95	61	83	76
Milk :												
For Manufacture ...	*	100	100	99	90	82	94	99	100	85	86	84
Whole ...	121	121	121	121	121	121	121	121	121	112	112	100
All ...	*	113	112	111	104	95	110	113	112	101	102	94
Farmers' Butter ...	80	81	80	78	76	76	85	86	86	68	68	66
Wool ...	*	59	59	57	58	55	63	65	77	93	87	78
Potatoes ...	86	90	104	79	73	81	64	68	70	121	118	123
Oats ...	77	71	69	69	66	64	94	93	90	87	84	77
Hay ...	77	77	78	75	75	73	74	78	76	91	86	81
Oat Straw ...	86	88	89	87	89	88	93	93	91	104	100	96
Flax ...	76	83	83	77	76	76	79	81	82	75	80	81
Grass Seed :												
Perennial ...	101	114	116	121	123	112	52	52	55	90	94	98
Italian ...	85	87	82	101	100	74	49	44	39	44	47	47
Mixed ...	94	—	70	93	86	75	—	44	44	—	77	67
All ...	103	114	107	123	113	91	62	55	52	76	71	76

Revised Index Numbers taking Account of Payments under the Cattle
Subsidy, the Wheat Act, and Government Payments for Milk.

Cattle : Fat ...	93	92	90	87	82	84	100	101	102	92	86	85
Milk :												
For Manufacture ...	*	126	136	121	120	119	120	119	117	103	102	101
All ...	*	123	127	121	120	120	121	120	119	108	108	100

* Not yet available. † Provisional.

The following are the most striking price changes during January, February and March, 1939:—

FAT CATTLE.—The index corrected for seasonal variation shows a rise in price from an index of 76 in January to 78 in March. Prices including subsidy have risen by 3 points since January to an index of 91. The downward trend in prices during the latter part of 1938 has been reversed in the first three months of 1939.

FAT SHEEP.—The increase in price between February and March is well outside the normal seasonal rise at this time of year by the corrected index.

BACON PIGS.—There has been a drop since January of 6 points in the corrected index due partially to the fall in the price of feeding stuffs.

EGGS.—The price in January has been the highest for that month since 1930. The fall in prices which usually occurs in the month of March happened this year in February, with the result that the corrected index shows a sharp drop from 103 in January to 74 in February, with an immediate rise to 92 in March.

MILK.—The corrected index for whole milk shows an increase of 3 points between January and March.

POTATOES.—The index number corrected for seasonal variation for the last three months has been well above the level of the beginning of the season, and also far above the level of the corresponding period of 1938. The index dropped by 7 points between January and February, but rose slightly between February and March.

OATS.—Prices have increased slightly in advance of the normal seasonal rise from a corrected index of 72 in November to 76 in March.

The corrected index for hens and chickens has fallen by 4 points between January and March, and the flax index by 3 points since the beginning of the year.

MARKETING SCHEMES.

AGRICULTURAL MARKETING (PIG INDUSTRY) ACT (N.I.) 1934.

PIG PRICES FOR APRIL, 1939.

The following announcement has been made by the Pig Industry Council for Northern Ireland.

PRICES FOR DEAD PIGS.

The prices per dead cwt. for dead pigs sold by producers to curers in Northern Ireland in April, 1939, are as follows:—

Weight Class. (Dead Weight)	Grade 1.	Grade 2.	Grade 3.	U.L. or U.F.	Partly Black Pigs.
c.1.0.21 to c.1.1.13	63/5	60/5	57/5	53/5	5/- below relevant Grade Price.
c.1.1.14 to c.1.2.3	67/5	64/5	61/5	57/5	
Weight Class. (Dead Weight)	Grade A	Grade B	Grade C	U.L. or U.F.	
c.1.2.4 to c.1.2.14	67/5	64/5	61/5	58/5	
c.1.2.15 to c.1.3.14	67/5	64/5	61/5	58/5	
c.1.3.15 to c.2.0.0	64/5	61/5	58/5	55/5	
c.2.0.1 to c.2.0.14	58/5	55/5	52/5	49/5	

Pig Carcases c.1.0.0 to c.1.0.20—60/5

(N.B. These prices are the same as those fixed for March, 1939).

Authorised cuts:—

- (a) Broken ham (dry, shank and/or shell bone break)—5% of the gross value of the carcase.
- (b) Broken ham (wet break)—12½% of the gross value of the carcase.
- (c) Shoulder-stuck carcase—3/- per shoulder affected.

The gross value of a carcase is the product of the dead weight and the relevant grade or other price per cwt.

Where portion of a pig carcase is condemned on account of disease the existence of which could not reasonably have been known to the producer before despatch to the curer, the appropriate grade price (or fixed price if the carcase weighs not less than 1 cwt. 0 qr. 0 lb. and not more than 1 cwt. 0 qr. 20 lb.) shall apply. If the carcase is wholly condemned on account of disease

the existence of which could not reasonably have been known to the producer before despatch to the curer the relevant Grade 2 or Grade B price (or fixed price if the carcase weighs not less than 1 cwt. 0 qr. 0 lb. and not more than 1 cwt. 0 qr. 20 lb.) shall apply.

The foregoing prices do not apply in the case of (a) wholly black pigs, boars, rigs or stags, sucked sows, and pig carcasses weighing under c.1.0.0 or over c.2.0.14 and (b) pigs visibly diagnosable as diseased before despatch by the producer and subsequently condemned; emaciated or screw pigs; smelling pig carcasses with definite indications of putrefaction and pig carcasses badly abused or damaged before being handed over by the producer to the curer.

PRICES FOR PIGS SOLD ALIVE ON DIRECT CONTRACT TO WILTSHIRE CURERS IN NORTHERN IRELAND, AND FOR PIGS SOLD ALIVE TO THE PIGS MARKETING BOARD (NORTHERN IRELAND) AND RESOLD TO WILTSHIRE CURERS IN NORTHERN IRELAND.

In the case of pigs sold alive to Wiltshire curers under direct contract, or sold to the Pigs Marketing Board and resold to Wiltshire Curers, the prices per dead cwt. during April, 1939, are as follows:—

Weight Class (Dead Weight)	Grade 1.	Grade 2.	Grade 3.	U.L. or U.F.	Unsuitable.
c.1.0.21 to c.1.1.13	72/5	69/5	66/5	62/5	59/5
c.1.1.14 to c.1.2.3	72/5	69/5	66/5	62/5	59/5
	Grade A.	Grade B.	Grade C.	U.L. or U.F.	
c.1.2.4 to c.1.2.7	69/5	66/5	63/5	60/5	
c.1.0.0 to c.1.0.20	Suitable 61/5		Unsuitable 59/5		
Over c.1.2.7	On the same basis as pigs sold dead.				

(N.B. These prices are the same as those fixed for March, 1939).

PRICES FOR PIGS SOLD ALIVE TO THE PIGS MARKETING BOARD (NORTHERN IRELAND) AND NOT RESOLD TO WILTSHIRE CURERS IN NORTHERN IRELAND.

In the case of pigs sold alive to the Pigs Marketing Board during April, 1939, and not resold to Wiltshire curers, the prices per live cwt., according to grade, are as follows:—

Live Weight.	Grade 1.	Grade 2.	Grade 3.		Unsuitable.
c.1.1.14 to c.1.2.13	46/-	46/-	46/-		44/6
c.1.2.14 to c.2.0.0	54/3	52/-	49/9	U.L. or U.F. 46/9	44/6
c.2.0.1 to c.2.1.14	47/6	45/3	43/-		40/9
c.2.1.15 to c.2.2.7 ¹	45/3	43/-	40/9		38/6
c.2.2.8 to c.2.2.21	40/9	38/6	36/3		34/-

(N.B. These prices are the same as those fixed for March, 1939).

These prices do not apply to live pigs under c.1.1.14 or over c.2.2.21, live pigs intended for breeding, live boars, live sucked sows, rigs or stags, injured or diseased pigs, live in-pig gilts, or live pigs sold (on contract, registered with the Pig Industry Council) to curers in Northern Ireland. All other live pigs inside the weights c.1.2.0 to c.2.2.21 can be sold only to the Board.

AUTHORISED DEDUCTIONS.

Every pig (dead or alive) sold to a curer or to the Pigs Marketing Board is subject to a levy at present amounting to 4/2d.

In addition to this amount, a deduction of 4d. per pig may be made in the case of sales to curers or to the Board (on pigs resold to curers in Northern Ireland) to cover insurance, so that the producer will not suffer financial loss if the carcass is condemned as unfit for human consumption.

GRADING STATISTICS.

Table showing the percentages of pig carcasses falling within the weight and grade classes indicated during January, 1939.

Under c.1.0.21		c.1.0.21 to c.1.1.13					c.1.1.14 to c.1.2.3.					Totals
Suitable	Un-suitable	Grade 1	Grade 2	Grade 3	U.L. & U.F.	U.	Grade 1	Grade 2	Grade 3	U.L. & U.F.	U.	
1.49	.24	2.73	1.47	.45	.18	.01	4.75	5.48	2.01	1.01	.03	19.85

Grade A.				Grade B.				Grade C.				
1	2	3	4	1	2	3	4	1	2	3	4	
8.74	21.02	3.75	.78	6.10	20.17	4.87	1.45	1.66	6.65	1.26	.32	76.77

Ungraded Carcases.						
Under Grade A measurements. U.L.	Over Grade C measurements U.F.	Wholly condemned U1.	Wholly black, injured or damaged U2.	Overweights, boars, sows, etc. X.	Partly Black Y.	
.04	1.79	.01	.51	1.01	.02	3.38
					Total	100%

These figures have been calculated from the purchase and grading statements which the curers furnish to the Ministry.

The volume of trade in pig carcases in the month of January was heavier than in December. The average price per head fell by 3/8d. to £5 3s. 10d. The average weight showed a reduction of 3 lbs. to c.1.2qr.21lb., and the average price per cwt. fell by 11d. to £3 1s. 9d. per cwt.

The following table gives the percentage results of an analysis of the purchase and grading statements furnished by Wiltshire Bacon Curers in respect of live pigs delivered on direct contract by producers during the month of February, 1939.

Weight Class.	Grade 1.	Grade 2.	Grade 3.	Unsuitable U.L. or U.F.	Total
Under c.1.0.0					.08
c.1.0.0 to c.1.0.20					.97
c.1.0.21 to c.1.2.3	51.28	30.53	7.64	2.61	92.06
	Grade A.	Grade B.	Grade C.		
c.1.2.4 to c.1.2.7	1.66	1.40	.36	.06	3.48
c.1.2.8 to c.1.3.14	1.34	1.46	.51	.08	3.39
Over c.1.3.14.					.02
				Total	100%

The average net price per cwt. in respect of these deliveries works out at £3 7s. 11d. after making allowance for insurance and contribution to the Pigs Marketing Board.

The average weight works out at c.1.1.18, the net average price per pig being £4 16s. 1d.

COST OF STANDARD PIG RATION.

The average retail cash price per cwt. of the standard ration for the sixteen weeks' period ended 18th March, 1939, was 8/8½d. The average price for

the similar period ended 18th February, was 8/8½d. These figures have been calculated by the Ministry from returns collected from ten representative centres in Northern Ireland.

The following is the ration upon which the feeding cost is based:—

Maize Meal	...	...	...	30%
Barley Meal	...	...	...	30%
White Pollards	...	...	...	20%
White Bran	...	...	...	10%
Meat Meal (60% Protein)	...	...	...	10%

THE CATTLE INDUSTRY (EMERGENCY PROVISIONS) ACTS, 1934 AND 1935 AND THE LIVESTOCK INDUSTRY ACT, 1937.

The following is a summary made under these Acts up to and including 8th April, 1939:—

Live Weight.			No. of Animals.	Total Amount Paid.		
				£	s.	d.
England and Wales	...	...	5,035,409	12,473,099	7	6
Scotland	...	...	1,536,607	4,050,444	15	6
Northern Ireland	...	...	523,617	1,120,581	0	1
TOTAL (United Kingdom)	...	...	7,095,633	17,644,125	3	1
Dead Weight.						
England and Wales	...	...	154,210	387,702	19	10
Scotland	...	...	47,406	139,153	0	11
TOTAL (Great Britain)	...	...	201,616	526,856	0	9

FAT CATTLE CERTIFIED FOR SUBSIDY.

The numbers of fat cattle certified for payment of subsidy in February, 1939, have been as follows:—

	February, 1939.					Corresponding totals	
	Home-bred		Imported		Totals	February, 1938	February, 1937
	Ordinary Grade	Quality Grade	Ordinary Grade	Quality Grade			
England	...	21,412	37,193	5,141	17,824	81,570	75,931
Wales	...	3,356	3,648	35	194	7,233	5,881
Scotland	...	1,943	15,258	603	10,062	27,866	28,295
Northern Ireland	...	6,483	2,661	536	373	10,053	9,162
United Kingdom	...	33,194	58,760	6,315	28,453	126,722	119,269
							137,410

As the great majority of fat stock markets are held on the early days of the week the rate of marketing of fat cattle cannot be judged accurately from the number of animals marketed in a calendar month. For comparative purposes appropriate weights are applied by the Livestock Commission to each day of the week, and the figures for each calendar month are adjusted accordingly, so as to allow as far as possible for the fact that a large number of markets are held on Mondays, and that the number of markets held decreases day by day as the week proceeds. The adjusted figures for February, 1939, 1938 and 1937, are 136,977, 128,993 and 148,459 respectively.

The average prices per live cwt. of certified cattle in February, 1939, have been :—

	February, 1939						Corresponding Averages in	
	Ordinary Grade		Quality Grade		Average		February, 1938	February, 1937
	s.	d.	s.	d.	s.	d.	s.	d.
England	37	0	40	1	39	1	43	2
Wales	36	0	38	4	37	4	42	7
England and Wales	36	10	39	11	38	11	43	2
Scotland	37	0	40	11	40	8	44	0
Northern Ireland ...	35	7	36	3	35	10	40	4
United Kingdom ...	36	8	40	1	39	1	43	2
							35	7

The average weights of the cattle in respect of which payments were made by the Livestock Commission during February were as follow :—England and Wales, 9 cwt. 3 qr. 18 lb.; Scotland, 10 cwt. 0 qr. 13 lb., and Northern Ireland, 9 cwt. 0 qr. 7 lb. In all countries the average weights for February showed a decrease compared with those for January. Compared with February, 1938, however, the average for Northern Ireland showed an increase of 30 lb., while England and Wales and Scotland also showed increases of 14 lb. and 8 lb. respectively.

WHEAT ACT, 1932.

ADVANCE PAYMENT OF £1,448,700 TO REGISTERED GROWERS.

The Wheat Commission despatched cheques to 26,341 registered growers on the 21st March in payment of an advance on account of deficiency payments payable under the Wheat Act for the cereal year ending 31st July, 1939. In 407 other cases where it was not practicable to make payment on the 21st March, cheques will be despatched as soon as possible.

Payment was made at the rate of 4/- per cwt. (18/- per qr. of 504 lbs.) in respect of 7,243,400 cwts. (1,609,600 qrs.) of wheat vouched for by 37,400 wheat certificates delivered to the Commission between the 1st January and 28th February, 1939.

The aggregate amount of this advance is approximately £1,448,700, and with the previous payments made in November and January, brings the total sum advanced on account of deficiency payments for the current cereal year to approximately £4,920,600. This sum covers 137,970 wheat certificates vouching for a total quantity of 24,603,000 cwts. (5,463,300 qrs.) of wheat.

The Commission hope to make an advance payment later in the cereal year to growers who delivered wheat certificates after the 28th February.

MARKETING OF EGGS ACTS, 1924—1937.

Just over a year ago the system of payment for eggs on a quality basis was introduced, and the Ministry has now had an opportunity of analysing the results of inspections of consignments exported through Northern Ireland ports during 1938. The most striking feature revealed is the general improvement in the quality and appearance of the eggs examined, and it is gratifying to note that, not only has the average number of "Seconds" per case (30 doz.) examined fallen from 4.17 in 1937 to 2.86 in 1938, but the number of eggs bordering on Second quality has shown a marked reduction.

As readers are aware, Northern Ireland eggs, in spite of the keenest competition, maintain a high reputation on the British market, and this position can only be secured so long as all concerned in the trade, and especially the producers, take steps to ensure that only eggs of the finest quality are marketed.

There is no doubt that payment on a quality basis has been the primary cause of the improvement during the past year, and it is hoped that next year's results will be even more satisfactory.

Producers who are experiencing difficulty in maintaining the quality of their supplies should consult the Ministry for advice.

AGRICULTURE ACT, 1937.

STANDARD ACREAGES FOR OATS AND BARLEY.

The Ministers responsible for agriculture in the United Kingdom have made an Order under the Agriculture Act, 1937, entitled the Home-Grown Oats and Barley (Standard Acreages) Order, 1939, dated March 15th,

declaring that the standard acreages ascertained in accordance with the provisions of Section 6 (2) of that Act are 1,286,855 acres for oats and 165,181 acres for barley.

The Agriculture Act, 1937, provides that the standard acreages are to be obtained by multiplying by eleven-tenths the qualifying acreage of land under oats and barley respectively in the year 1937. Under the provisions of the Act the rate of subsidy payment in any year from 1938 to 1941 is to be proportionately reduced if the qualifying acreage in that year for either oats or barley exceeds the standard acreage.

OATS AND BARLEY SUBSIDY.

Notification has been received from the Ministry of Agriculture and Fisheries to the effect that the rates of subsidy payable under the Agriculture Act, 1937, have been determined at 13/2. per acre for oats and 10/10d. per acre for barley.

The Ministry expects to be able to commence payments on this basis on 1st of May.

It will be recalled that the announcement by the Minister of Agriculture and Fisheries on February 23rd stated that payments made under Part II of the Agriculture Act were to be regarded as advance payments, and that it was proposed to introduce legislation which would authorise the Ministers concerned to make additional payments in respect of the crops grown in 1938. The precise conditions relating to these additional payments have yet to be determined.

AGRICULTURAL NOTES.

SEASONAL FARM NOTES.

DESTRUCTION OF WEEDS.—The only satisfactory method of keeping most weeds in check is to continue pulling them up, or otherwise destroying them so that they are prevented from becoming firmly established and producing seed. It is often possible during spring cultivations to gather up the roots of perennial weeds, and this should be done where practicable, as it aids considerably in preventing the appearance of weeds in the following crop. Such roots should be dumped on waste ground, allowed to dry, and then burned.

LEATHER-JACKET GRUBS IN OATS.—This pest is often responsible for much damage to the lea oat crop, especially in oats following old pasture which was not well grazed or mown comparatively bare during the previous autumn. If the braird of oats is patchy or shows signs of turning yellow on land which is well drained this pest may be suspected.

The most satisfactory method of dealing with an attack of leather-jacket grub in corn brairds is to dress them with a poisoned bait. A suitable bait can be prepared by mixing 1 lb. of Paris Green with 28 lb. bran and moistening the mixture with water. This amount is sufficient to treat 1 statute acre and should be applied in the evening, as the grubs come to the surface to feed during the night. This bait is comparatively cheap, and it is a wise precaution to apply it even before obvious symptoms of attack are noticed, where the crop is being grown in a field following old pasture. It can do no harm, and when applied soon after the braird appears may prevent serious injury being caused. Further details with regard to the destruction of this pest are given in Leaflet No. 22.

It should be remembered that Paris Green is a very poisonous substance, and that extreme care should be taken to prevent farm stock, including poultry, from getting access to the bait before it is spread. Further, utensils and bags used to mix and hold the bait should not be used in connection with the mixing and storage of farm foods.

STOCK-SEED POTATOES.—Farmers intending to grow a potato crop of stock-seed standard should take care to isolate the good stock from inferior stock. The best plan is to plant the stock-seed in a field by itself with turnips, mangels, cabbage or some crop other than potatoes in the same field; or a small field may be planted entirely with stock-seed.

CERTIFIED CROPS.—Farmers intending to have their crops of potatoes inspected during the coming summer with a view to obtaining certificates of

purity, should take care to separate varieties having tubers of the same colour with at least six drills of a variety having tubers of a different colour, or with cabbage or turnips. Certificates will not be given in respect of crops which are not adequately separated from crops of another variety which has tubers of the same colour.

WHEAT.—A backward crop of autumn-sown wheat will benefit from an application of 1 cwt. sulphate of ammonia, nitro-chalk or nitrate of soda, per statute acre. This dressing should be applied now, and the ground harrowed lightly afterwards. A proud growth of wheat may be checked by driving a flock of sheep over the crop and allowing them to eat the tops of the young plants.

TURNIPS.—Finger-and-toe disease attacks crops of the turnip and cabbage family which are growing in sour soil. Where this disease occurs in either turnips or kale, or where turnips do not keep well throughout the winter, it is strongly recommended that from 25 to 30 cwt. of burnt lime per statute acre be applied to the ground in which it is intended to grow these crops. The best time to apply lime for this purpose is after the final ploughing and before the ground is made ready for drilling.

Turnips respond well to a liberal dressing of a phosphatic manure, and from 4 to 6 cwt. per statute acre of superphosphate, high-grade basic slag, Gafsa rock phosphate or Semsol should be applied, in addition to a dressing of from 12 to 15 cwt. farmyard manure. If farmyard manure is not available a dressing of a mixture of

1 cwt. sulphate of ammonia,
4 to 6 cwt. superphosphate, Gafsa phosphate or Semsol,
1½ cwt. 30 per cent. potash salts.

should be applied to each statute acre. Basic slag can also be used as the source of phosphate for turnips to be grown without farmyard manure, but it should be applied separately and not mixed with sulphate of ammonia, as if this is done there will be a loss of nitrogen in the form of ammonia gas. Basic slag should, if possible, be used where "finger and toe" disease is feared, especially if the ground has not been limed.

MANGELS.—On heavy or peaty soils where satisfactory yields of turnips cannot be obtained, mangels should be grown. This crop responds to liberal dressings of farmyard manure, and from 20 to 25 tons per statute acre should be applied. The following mixture of artificial manures should be applied in addition to the farmyard manure:—

2 cwt. sulphate of ammonia	} per statute acre.
4 „ superphosphate	
4 „ kainit	

A backward crop will benefit from an application of 1 cwt. of nitrate of soda at thinning time.

CABBAGE AND KALE.—These crops are of particular value in providing a supply of succulent green food for all classes of stock when grass is failing in autumn and early winter. Kale can be used to replace roots to some extent, especially on dairy farms where the feeding of kale tends to maintain the production of a rich coloured milk during winter. A supply of green food during winter aids in sharpening the appetites of cattle and in keeping them in a thriving and healthy condition.

The following dressing of manures per statute acre is recommended for cabbage and kale:—

20 to 25 tons farmyard manure,
2 cwt. sulphate of ammonia,
4 cwt. superphosphate
1 cwt. 30 per cent. potash salts.

The potash salts may be omitted if the crop is being grown on heavy soils.

The Early Drumhead variety of cabbage is recommended. The seed may be sown in drills in the same way as for turnips at the rate of from 3 to 4 lb. per statute acre, and the plants should be thinned later to a distance of 24 inches apart. The more usual method, however, is to sow the seed in a seed-bed in autumn and to transplant the young plants to drills in early summer.

Marrow stem kale seed is usually sown in drills in spring at the rate of from 5 to 6 lb. per statute acre, and the plants thinned in summer. If the plants are left too thin the stalks become woody and are not eaten by stock. Marrow stem kale plants should be singled to not more than 6 inches apart.

FLAX.—Farmers are reminded of the desirability of sowing pedigree strains of flax such as Liral Monarch, Liral Crown, Stormont Gossamer or Stormont Cirrus. These varieties have been shown by tests to produce a greater return per acre than the commercial varieties (see Leaflet No. 1—Flax Seed, 1939). It is understood that seed of these new varieties can be obtained at much cheaper rates this season than in previous seasons, and farmers are urged to take advantage of these low prices to obtain good seed.

MANURES FOR FLAX.—The most important manure for flax is potash, and a dressing of from 1 to 1½ cwt. muriate of potash, or from 4 to 6 cwt. of kainit, should be applied to ground intended for flax. In the case of land in poor condition it would be advisable to apply in addition ½ cwt. sulphate of ammonia per statute acre.

PASTURES.—Care should be taken not to overstock pastures during the first few weeks of the grazing season, especially in fields where clovers tend to smother the grasses. In choosing between fields for grazing first the following points should be kept in mind:—

- (a) where the grasses tend to crush out the clovers and it is desired to encourage growth of clover, the pastures should be grazed early;

- (b) where the clovers tend to smother the grasses the pastures should not be grazed until further on in the season, so as to permit the grasses to become well established.

SEEDS MIXTURES.—When sowing crops which will occupy the ground only for a portion of a year, farmers take great pains to select the best possible seed—a practice which is strongly commended—yet when sowing out ground to grass, a crop which will occupy the ground for several years, some farmers adopt the mistaken policy of sowing inferior and unsuitable mixtures of seeds. This is unfortunate, and it is responsible to a large extent for many of the thin and weedy pastures which are seen throughout the country. It is admitted that suitable manuring will improve pastures, but it should be realised that manuring cannot transform a poor pasture into a good one if there is not a foundation of good pasture plants present. The sowing of a suitable seeds mixture is, therefore, the first step in obtaining a good pasture. When making up a seeds mixture the following points should be kept in mind :—

- (a) Do not sow ryegrasses in excess ;
- (b) Include an adequate proportion of permanent grasses, particularly cocksfoot ;
- (c) Sow wild white clover ;
- (d) Do not sow highly complicated mixtures ;
- (e) Do not sow mixtures of unknown quality or constitution ;
- (f) Ensure that all seeds used are purchased from a reliable seeds-merchant.

Grass-seed mixtures suitable for various types of soil are given in detail in Leaflet No. 40. Every farmer should read this leaflet before ordering his mixtures of grass and clover seeds.

SEASONAL LIVESTOCK NOTES.

OX-WARBLE FLY.—In accordance with the Ox Warble Fly Order, all cattle infested with this pest should have been dressed between the 12th and 19th days of April, and the third dressing must be applied during the period 10th to 17th May. It is essential that the dressings should be carried out during these periods, and farmers are warned that failure to do so is likely to lead to a prosecution.

Information regarding the preparation of suitable dressings is given in Leaflet No. 64, and the names of the preparations recommended for use this season are given in Circular No. 13.

CALF REARING.—The following points should be kept in mind with regard to the rearing of calves :—

- (1) Observe strict cleanliness at calving time and paint the navel cord with an iodine solution ;
- (2) Keep the calf-house clean and well bedded with clean straw ;
- (3) Do not over-crowd the calves in small, badly-ventilated houses ;
- (4) Dishorn bull calves which are to be castrated ;
- (5) Keep all feeding vessels clean ;
- (6) Feed the calves regularly ;
- (7) Feed each calf separately from a bucket ;
- (8) Let all changes in food be made gradually ;
- (9) Do not use expensive patent calf-foods ;
- (10) Read Leaflet No. 54, "The Breeding and Rearing of Calves", for further details.

EWES AND LAMBS.—The tails of young lambs should be docked as soon as the lambs reach the third week in life. A clean, disinfected knife should be used. Ram lambs not required for breeding should be castrated when three weeks old, precautions being taken to prevent any infection from entering the wound. Full details with regard to these operations are given in Leaflet No. 63.

Ewes which are on poor pastures, or which show a tendency to scour, should receive hand feeding. A suitable ration for this purpose consists of equal parts of crushed oats and maize meal or flaked maize.

FEEDING DAIRY COWS.—The composition of the ration fed to dairy cows will have to be altered when the cows are turned out to grass. In order to counteract the laxative effect of the grass, the cows should be given only foods of a starchy nature such as maize meal, crushed oats, etc. As soon as the cows have become accustomed to the grass, hand feeding may be discontinued, except in the case of cows producing a very heavy yield of milk.

CONDIMENTS, CONDITIONERS AND TONICS.—It would appear that substantial quantities of expensive patent foods—condiments, tonics, etc.—are being purchased by farmers from travelling salesmen. Farmers are again reminded that the use of such expensive materials only serves to raise the cost of feeding and is of no advantage to animals which are fed on properly balanced rations. The County Instructor in Agriculture will give free advice with regard to the rationing of all classes of farm stock.

SEASONAL GARDEN AND ORCHARD NOTES.

SPRAYING APPLE TREES.—Apple trees of most varieties will now be at the stage of growth at which the first application of Bordeaux mixture for the control of apple scab disease should be applied. This application should be made when the leaves have unfolded from over the flower clusters, but before any of the flowers show colour. If possible, spraying should be done when the spray dries quickly on the trees, for if done during dull weather when the spray lies for a considerable time on the trees before drying, there is a risk of damage being caused to the young leaves. The Bordeaux mixture recommended consists of:—

1 lb. bluestone,
4½ lb. hydrated lime (or 8 lb. putty lime),
40 gallons water.

If caterpillars are present on the trees lead arsenate powder should be added at the rate of from 1 to 1½ lb. to each 40 gallons of the Bordeaux mixture. Where spraying with a tar oil wash was not carried out during the dormant period, and where a petroleum wash was not applied it will be advisable to add 6 fluid ounces of nicotine, or 8 fluid ounces of nicotine sulphate, to each 40 gallons of the Bordeaux mixture to destroy aphides, apple sucker and capsid bugs. Particulars of the full spraying programme are given in Leaflet No. 33.

GRAFTING APPLE TREES.—The grafting of apple trees should be undertaken whenever the sap has begun to move freely. If the various forms of “frame-work” grafting are adopted it is possible to obtain fruiting trees sooner than if the old method of re-heading is practised.

AMERICAN GOOSEBERRY MILDEW.—Where an attack of this disease is anticipated, gooseberry bushes of such varieties as Whinham’s Industry, Crown Bob, Warrington, and Whitesmith, should be sprayed just after flowering with a solution of ammonium polysulphide prepared by adding ¼ pint ammonium polysulphide to 5 gallons water in which from 2 to 6 oz. of soft soap has been dissolved.

This spray cannot be used on bushes of “yellow” or “amber” varieties, as it would cause defoliation. These should be sprayed at the same stage of growth, as in the case of the other varieties, with a solution of washing soda. This is prepared by dissolving 10 oz. of common washing soda in 5 gallons of water and adding ¼ pint skimmed milk.

A second application of each of these sprays should be given at from two to three weeks after the first. Full particulars of spraying for the control of this disease are given in Leaflet No. 49.

BLACK CURRANT MITE.—Black currant bushes which are slightly attacked by black currant mite should be sprayed with Winter Volck when in full flower. The spray is prepared by mixing $\frac{1}{4}$ pint of Winter Volck with an equal quantity of water, and then adding sufficient water to make up to 5 gallons. Some injury to the foliage may result if frost occurs soon after the Winter Volck has been applied.

Bushes which are severely attacked by black currant mite should be uprooted and burned.

STRAWBERRIES AND RASPBERRIES.—Plantations of these fruits should now be cleared of all weeds and mulched with long strawy manure. Particulars of the cultivation of strawberries and raspberries are given in Leaflets Nos. 68 and 71 respectively.

VEGETABLES.—Seeds of lettuce, peas, beans and turnips should be sown now for succession. Towards the end of April, or early in May, seeds of beetroot, French beans, runner beans and vegetable marrows should be sown out of doors, and a further sowing of peas and broad beans should be made at the same time for succession.

FLOWERS.—Flower beds and borders should be cleared of all weeds, dead leaves, etc., and left tidy. Plants requiring supports should be staked before they actually need it. Seeds of wallflowers, forget-me-nots, Canterbury bells, etc., should be sown early in May.

GENERAL.—Keep a look-out for pests and spray with a suitable insecticide before they become numerous. Weeds should be kept down, for if they are allowed to produce seed the work of suppressing them will be greatly increased. Use the hoe frequently amongst all growing crops.

LAWNS.—Lawns should be mown regularly, and dressed with a suitable lawn sand, if weeds are present. The following mixture is recommended :—

- 1 part by weight calcined sulphate of iron
- 3 parts by weight sulphate of ammonia.
- 20 parts by weight clean sand..

It is important that the sand should be free of weed seeds. The mixture should be applied at the rate of 4 oz. per square yard once a month during the growing season.

SEASONAL POULTRY-KEEPING NOTES.

HATCHING.—Hatching should be discontinued from now onwards as pullets hatched now will not commence to lay until the peak of winter egg prices is past.

WEANING FROM HEAT.—While it is desirable from the point of view of the economy of fuel and labour to wean chickens from artificial heat at the earliest possible age, the change must be made gradually, otherwise there will be a risk of a check in growth and of mortality amongst the chicks due to the contraction of chills. There is a further source of danger at this period in that the birds will tend to huddle together if the heat is taken away suddenly, and this may result in some birds getting smothered. To lessen the possibility of such an occurrence a low slatted-floor platform should be provided in the brooder house some time before the heat is withdrawn.

FATTENING COCKERELS.—As soon as the male birds can be detected they should be separated from the pullets, penned off and fattened as quickly as possible. A suitable ration for this purpose consists of—

1	part	by	weight	maize	meal,
1	„	„	„	pollard,	
1	„	„	„	Sussex	ground
				oats.	

This meal mixture should be made into a mash by wetting with separated milk or buttermilk.

MANAGEMENT OF GROWING PULLETS.—The pullets should be allowed to have a free range over fresh pastures. The birds should not be overfed, but allowed to grow steadily.

A suitable mash may be prepared for pullets by wetting the following meal mixture with separated milk :—

3	parts	by	weight	bran,
4	„	„	„	pollard,
2	„	„	„	Sussex
				ground
1	„	„	„	maize
				meal.

CULLING.—Both the laying and breeding flock should be rigorously culled from now onwards, and all hens showing lack of vigour should be disposed of. Hens intended for breeding should be given a free range and fed moderately with non-forcing foods. Older hens which have proved good breeders in the past, and still show signs of health and stamina, should be retained with a view to breeding from them again next season. Similarly it is a sound practice to retain the male birds which have proved to be good breeders, for mating next season with hens to which they are not related.

TURKEYS.—It is advisable to set the first dozen eggs as soon as they are laid in order to test fertility, so that a change in mating can be made if necessary. Information regarding the hatching, rearing and fattening of turkeys, may be obtained from Leaflet No. 37.

POULTRY RUNS.—An effort should be made to refresh all ground on which poultry have been running for some time. The best method to adopt is to

plough the ground and get it back into pasture again. A crop of oats may be taken and this used as a nurse crop for the young "seeds", or the mixture of grass and clover seeds may be sown without a nurse crop. The following mixture of seeds has been found satisfactory in producing a good sole in poultry runs:—

16 lb.,	Kentish indigenous perennial ryegrass.
4 "	Italian ryegrass,
12 "	Swedish leafy-type cocksfoot,
3 "	rough stalked meadow grass,
3 "	crested dogtail,
1 "	wild white clover.

Total 39 lb. per statute acre.

BROWN HEART DISEASE IN SWEDES AND TURNIPS.

Brown Heart or "Raen" in swedes and turnips has been prevalent in Northern Ireland for some years, and continues to cause considerable damage to the crop. Unfortunately there is no outward appearance of infection during growth, the foliage remains normal and the bulb appears to be perfectly sound, and it is only by cutting open the root that the presence of the disease can be detected. This disease materially lowers the feeding value of the roots for stock, and infected roots are useless for human consumption, being hard and stringy when boiled. The keeping properties of infected roots are also adversely affected, particularly after a period of severe frost.

When an infected root is cut through the middle, greyish or brownish coloured areas are apparent in the central tissue, although there is always a ring of healthy tissue just beneath the skin. In a light attack the diseased area may be only a small patch, but in a severe attack the tissue has a distinct mottled and fibrous appearance, and small cracks are sometimes present.

Brown Heart is due to a deficiency of boron in the soil, and can be very efficiently controlled by the application of not more than 20 lb. of finely granulated borax per statute acre.

Borax is a plant poison when applied in excess, and it is, therefore, important that the dressing should not exceed 20 lb. per statute acre, and that it should be evenly distributed over the area to be treated. The best and safest method of application is to mix the borax thoroughly with sufficient filler, such as sand or dry soil, to ensure uniform distribution, and to apply it during the preparation of the land prior to opening the drills. The borax will thus be intimately mixed with the soil, and will not retard the growth of the turnip seedlings. It can, however, also be applied by including it with the mixture of artificial manures for turnips.

ANNOUNCEMENTS AND REMINDERS.

GENERAL.

Ox-WARBLE FLY.—The third dressing of cattle infested with warbles should take place between the 10th and 17th days of May. Any cattle which have been turned out to the grass should be brought into a house and examined for warbles.

DISHORNING OF CALVES.—All bull calves which are not being retained for breeding purposes should be dishorned before the age of nine days. The caustic potash method is effective and cheap, and is described in Leaflet No. 5.

SEEDS MIXTURES.—Sow only good mixtures. Examples of these are given in Leaflet No. 40.

LEATHER-JACKET GRUBS.—Apply poison bait if attacks by these grubs are feared in oat brairds. See Leaflet No. 22.

CHARLOCK DESTRUCTION.—Charlock growing in brairds of oats, barley and flax should be destroyed before the plants are very large. This can be done by spraying with copper sulphate solution of suitable strength. Full particulars are given in Leaflet No. 38.

BROADCASTING.—The Belfast station of the British Broadcasting Corporation has arranged for the following talks on agricultural topics to be broadcast by those mentioned:—

Day & Date	Time	Subject	Speaker.
Tuesday, 25th April	9-45 to 10-0 p.m.	How to get Top Price for Eggs	Mr. R. F. Thompson, Ministry of Agriculture.
Monday, 8th May	7-30 to 7-50 p.m.	Seasonal Diseases of Farm Stock	Mr. W. R. Kerr, M.R.C.V.S., D.V.S.M., Ministry of Agri- culture.
Monday, 22nd May	8-15 to 8-30 p.m.	How I run My Farm.	Mr. S. J. Crowe, Drumwhinney House, Kesh.
Monday, 5th June	7-30 to 7-45 p.m.	Healthy Seed Potatoes	Dr. A. E. Muskett, Queen's University, Belfast.

POTATO MARKETING IN GREAT BRITAIN.

NEW RIDDLE REGULATIONS.

The Potato Marketing Board, on April 5th, decided that the minimum riddle of $1\frac{3}{4}$ inches now in force for the varieties Kerr's Pink and Redskin be reduced to $1\frac{5}{8}$ inches. Other regulations (including the prohibition of the sale of potatoes over $1\frac{1}{4}$ lbs. in weight) are unchanged.

The minimum riddles in force for the whole of Great Britain are now as follows:—

Golden Wonder— $1\frac{1}{2}$ inches.

King Edward, Red King, Gladstone, Kerr's Pink and Redskin— $1\frac{5}{8}$ inches.

All other varieties— $1\frac{7}{8}$ inches.

SCHOOLS NEWS.

TRAINING OF GIRLS IN AGRICULTURAL SUBJECTS.

The activities of women in farm life in Northern Ireland have an important bearing on the prosperity of the agricultural industry generally. The poultry industry for example, has been built up mainly by the womenfolk on the farm, and its importance can be judged from the fact that it is estimated that the output of eggs and poultry is equal in value to the output of cattle.

In these days of keen competition it is essential that farmers' daughters shall have a knowledge of modern methods in their particular sphere of the agricultural industry. The Ministry has, therefore, provided two Schools where instruction is given in such subjects as Poultry-keeping, Dairying, and Rural Housewifery.

NORTH-WEST SCHOOL, STRABANE.

Admission to this School at the commencement of any of the four annual sessions of 11 weeks' duration, which begin in January, April, July and October of each year, is gained through the medium of Scholarships offered by each County Committee of Agriculture in Northern Ireland. These Scholarships are awarded to equally eligible applicants in the order in which their applications are received, and cover the cost of tuition, board and residence at the School. The instruction given at this School is adapted to meet the needs of girls who, having completed their primary school education, wish to obtain instruction of a specialised nature, and is such that, on the completion of a course of training, they are better qualified when they return to their home farms to pursue with interest and added gain the work pertaining to such a sphere of life. The minimum age for admission is 16 years, and those girls who wish to apply for one of the County Committee's Scholarships should obtain the free illustrated School Prospectus from either the Secretary, Ministry of Agriculture, Stormont, Belfast, or the Secretary (or Agricultural Organiser) of the County Committee of Agriculture for the County in which they reside. Applications should be submitted to the Secretary or Agricultural Organiser of the applicant's County Committee of Agriculture. It should be noted that girls who have satisfactorily completed a course at the North-West School will receive preference when applying for admission to the Ulster Dairy School, Cookstown, for more advanced instruction.

The next session at the School will commence on the 18th July, and early application is, therefore, essential.

The names of the students admitted to the North-West School for the session which commenced on the 4th April, and which will terminate on the 24th of June, 1939, are as follows :—

County Antrim :

Miss M. A. Belshaw, White Mountain, Lisburn.
Miss I. M. Curran, Pond Park, Lisburn.
Miss S. M'Galliard, Loughan, Garronpoint.

County Armagh :

Miss E. Browne, Rathconville, Poyntzpass.
Miss A. M. Gillespie, 13 English Street, Armagh.
Miss M. B. M'Geeney, Cornonagh, Ballsmill, Newry.
Miss M. E. Morton, Ballyhoy, Milford, Armagh.

County Down :

Miss M. Cavan, Birr Point, Ballyhalbert.
Miss A. Corry, Saul, Downpatrick.
Miss J. M. Dougan, Ballycross, Banbridge.
Miss E. Neill, Ballydoughan, Portadown.
Miss M. F. V. Smith, Mullaghmore, Hilltown.
Miss H. Stranaghan, Moneyslane, Ballyrone, Banbridge.
Miss E. Spiers, Flush, Drumadonald, Ballyrone, Banbridge. (2nd term.)

County Fermanagh :

Miss M. Drumm, Springtown, Kinawley.
Miss C. E. Kerr, Carrick, Derrygonnelly.
Miss T. M'Loughlin, Lisnarick, Irvinestown.

County Londonderry :

Miss M. A. Long, Lough Enagh Villa, Londonderry.

County Tyrone :

Miss F. L. Hamilton, Hill House, Ganvaughan, Castlederg.
Miss M. M'Canny, Carrickamulkin, Drumquin.
Miss M. M. M'Canny, Tattysallagh, Clanabogan, Omagh.
Miss M. E. E. M'Dowell, Dervaghroy, Beragh.
Miss E. E. Sproule, Ganvaughan, Castlederg.
Miss A. Tuohey, Formal, Sheskinshule.

ULSTER DAIRY SCHOOL, COOKSTOWN.

At this School practical and theoretical instruction is provided in Dairying and Poultry-keeping in all their branches, as well as in Rural Housewifery, which includes cookery, laundry and sewing. The School is the most up-to-date of its kind in Northern Ireland and, besides training girls who will return to their own homes and put their knowledge into practice there, it also enables suitable pupils to qualify for free training as dairymaids. In addition, girls trained at this School may, if they attain a sufficiently high standard at the term examinations, be recommended for more advanced training with a view to qualifying as Instructors in Poultry-keeping and Butter-making. Under the County Committees of Agriculture these officers command salaries ranging from £170 per annum to £300 per annum.

The ordinary School course lasts for two terms, and the School fees, by reason of the fact that entry is by partial Scholarship, are only four guineas

per term of 15 weeks, inclusive of board and residence. The free illustrated Prospectus of the School may be obtained from the Secretary, Ministry of Agriculture, Stormont, Belfast, and from the Lady Superintendent, Ulster Dairy School, Cookstown.

The next session at this School will commence on the 2nd of May, and as eligible applicants are admitted in the order of receipt of applications in the Ministry's offices, girls who wish to undergo a course of training should submit their applications to the Secretary, Ministry of Agriculture, Stormont, Belfast, without delay.

SEVENTEENTH EGG LAYING TEST AT STORMONT.

The sixth period of four weeks ended on the 17th March, 1939. There was a further increase in egg production. The total number of eggs laid by the competing birds was 13,264, which gives an average of 17.54 eggs per bird, as compared with 16.17 for the previous period, and 17.7 for the sixth period of the previous test. Of the 13,264 eggs laid 11,974 (90.26 per cent.) were scoring eggs, i.e., 2 oz. or over in weight.

The highest sectional average egg production during the sixth period is to the credit of the Rhode Island Reds in Section 6, viz. 19.3 eggs per bird, the White Wyandottes in Section 2 being next with an average of 18.2 eggs per bird.

The average production during the 24 weeks the test has been in progress, based on the flock of 756 birds, was 83.44 eggs per bird as compared with 81.6 for the corresponding 24 weeks of the previous test. The average production of the 721 birds alive at the end of the sixth period was 86.6 eggs per bird.

MORTALITY.—Thirty-five of the 756 birds accepted for the test have died. This represents a rate of 4.62 per cent., which is 1.03 per cent. lower than the rate for the corresponding 24 weeks of the previous test. Twenty-two pens have each lost one bird, five pens have each lost two birds, and one pen has lost three birds.

The number of deaths and percentage mortality in the different sections are as follows:—

Section	Breed	No. of Birds	No. of Deaths	Percentage Death Rate
1	White Wyandottes (open) ...	120	2	1.66
2	" " (Stationholders) ...	60	3	5.00
3	White Leghorns (open) ...	60	5	8.33
4	" " (Stationholders) ...	66	7	10.60
5	Rhode Island Reds (open) ...	174	5	2.87
6	" " (Stationholders) ...	66	4	6.06
7	Any other breed ...	150	6	4.00
8	Clubs (Any Breed) ...	60	3	5.00

The mortality amongst the different breeds is as follows:—

Breed.	No. of Birds.	No. of deaths.	Percentage death rate.
Rhode Island Red	282	11	3.9
White Wyandotte	198	6	3.0
White Leghorn	126	12	9.3
Brown Leghorn	12	1	8.3
Black Leghorn	6	—	—
Light Sussex	66	—	—
Buff Rock	42	3	7.1
Maran	6	2	33.3
Silver Grey Dorking	6	—	—
Welsummer	6	—	—
Ancona	6	—	—

The encouraging features about this analysis are the absence of deaths amongst the Light Sussex, and the comparatively low death rate amongst the White Wyandottes and the Rhode Island Reds. The three Buff Rock casualties are all from the same pen. The numbers of Brown Leghorns and Marans are too small to justify comment.

The following are particulars of the leading pens in each Section:—

SECTION 1. WHITE WYANDOTTES (Open). 20 pens.

Position	No. of Pen	Name and Address of Owner.	Number of eggs laid.				Test Score
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	12	Mr. J. Lenaghan, Tyconnett, Ballynahinch, Co. Down.	305	319	22	—	624
2	1	Mrs. K. Bamforth, Melmount Road, Strabane, Co. Tyrone.	455	165	12	—	620
3	11	Mr. J. Lenaghan, Tyconnett, Ballynahinch, Co. Down.	333	273	37	—	606
4	8	Mrs. D. C. Gamble, The Retreat, Coalisland, Co. Tyrone.	277	310	55	—	587
5	19	Dr. J. Stuart, Killyflue, Ballymena, Co. Antrim.	132	436	131	1	568

SECTION 2. WHITE WYANDOTTES (Stationholders). 10 pens.

Position	No. of Pen	Name and Address of Owner.	Number of eggs laid.				Test Score
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	25	Miss A. Brown, Ballyhill, Crumlin, Co. Antrim.	181	438	47	—	619
2	30	Mrs. M. J. Veitch, Knockninny, Thompson's Bridge, Enniskillen, Co. Fermanagh.	368	212	20	—	580
3	23	Mrs. J. Armstrong, Keeranbeg House, Donagh, Lisnaskea, Co. Fermanagh.	267	261	39	3	528

SECTION 3. WHITE LEGHORNS (Open). 10 pens.

1	41	Mr. J. Waugh, Oldfreck, Ballycarry, Belfast.	254	334	60	—	588
2	39	Mr. J. Telford, Drumarkin, Rathfriland, Co. Down.	326	246	43	1	572
3	34	Mrs. H. M. Fletcher, Ashgrove, Lisadian, Hillsborough, Co. Down.	151	275	57	—	426

SECTION 4. WHITE LEGHORNS (Stationholders). 11 pens.

1	52	Mrs. J. Short, Tullyvalley, Seskinore, Co. Down.	246	265	120	1	511
2	50	Miss I. J. Magill, Mulloughdrin, Dromore, Co. Down.	166	314	99	5	480
3	47	Miss I. Gilmer, Rashee, Ballyclare, Co. Antrim.	105	374	79	1	479

SECTION 5. RHODE ISLAND REDS (Open). 29 pens.

1	66	The Marquis of Hamilton, Baronscourt, Omagh, Co. Tyrone.	321	361	31	—	682
2	67	Miss J. A. Irwin, Mount Irwin, Tynan, Co. Armagh.	155	444	45	1	599
3	74	Mr. R. J. O'Hanlon, Mullahead, Tanderagee, Co. Armagh.	285	248	182	1	533
4	73	Mrs. J. McNeill, Drain's Bay, Larne, Co. Antrim.	335	187	13	—	522
5	61	Mrs. E. R. Dunwoody, Benmore, Islandmagee, Co. Antrim.	112	410	81	2	522

SECTION 6. RHODE ISLAND REDS (Stationholders). 11 pens.

Position	No. of Pen	Name and Address of Owner.	Number of eggs laid.				Test Score
			Super Grade	1st Grade	2nd Grade	Below 2nd Grade	
1	89	Miss M'Kee, Ardmillan House, Killinchy, Co. Down.	241	405	65	—	646
2	83	Mrs. H. H. Dickson, Lower Coagh, Co. Tyrone.	255	387	65	—	642
3	82	Mrs. H. Rea, Lisowen, Listooder, Crossgar, Co. Down.	305	297	31	—	602

SECTION 7. ANY OTHER PURE BREED. 25 pens.

1	107	Mr. R. Holmes, Killykergan, Coleraine, Co. Derry. (Buff Rock)	185	378	148	1	563
2	100	Mrs. J. W. Murland, Ardnabannon, Annsborough, Co. Down. (Light Sussex)	159	287	58	1	446
3	113	Mr. R. Holmes, Killykergan, Coleraine, Co. Derry. (Black Leghorn)	154	288	112	4	442
4	96	Greenmount Agr. and Hort. College, Muckamore, Co. Antrim. (Light Sussex)	100	340	75	14	440
5	97	Miss M. Lawson, Roundhill House, Strabane, Co. Tyrone. (Light Sussex)	256	179	54	3	435

SECTION 8. CLUB ENTRIES. 10 pens.

1	126	Portadown Poultry Club, Co. Armagh. (Rhode Island Red)	84	490	114	1	574
2	120	Ballywalter Young Farmers' Club, Co. Down. (Rhode Island Red)	210	332	26	—	542
3	124	Dungannon Poultry Club, Co. Tyrone. (White Wyandotte)	215	321	91	—	536

"Test Score" means the total of the super-grade and first-grade eggs.

Pen No. 66 of Rhode Island Reds in Section 5 entered by the Marquis of Hamilton retains the leading position in the entire test. Second place is occupied by Miss S. McKee's Pen No. 89 of Rhode Island Reds in the Stationholders' Section for that breed, while Pen No. 25 in the same section entered by Mr. H. H. Dickson, is third. Fourth place is taken by Mr. Lenaghan's pen No. 12 of White Wyandottes in Section 1, which has displaced Mrs. Bamforth's pen from the leading position in that Section. Mr. Waugh's pen of White Leghorns in Section 3 is now leading in that Section, having displaced Mr. Telford's pen, which is now second.

PRICES OF FEEDING STUFFS AT SPECIFIED CENTRES.

The following table shows the retail cash prices per cwt. of Feeding Stuffs at 1st April, 1939, in ten representative centres in Northern Ireland.

	Antrim	Armagh	Ballymena	Belfast	Castellwellan	Coleraine	Dungannon	Enniskillen	Omagh	Strabane
Protein Foods :	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Linseed (whole) ...	13 0	16 0	16 0	16 0	—	18 0	17 0	17 6	17 0	—
Linseed Cake, home-made ...	11 6	13 0	11 9	12 0	—	12 6	13 6	12 0	12 6	—
Linseed Cake, foreign ...	—	12 0	11 6	11 0	11 3	12 0	11 6	10 0	11 0	10 9
Linseed Cake Meal ...	11 6	13 0	11 6	11 0	11 3	11 6	13 6	12 6	11 6	11 0
Cotton Cake, decorticated ...	9 6	—	9 3	10 6	10 0	10 0	10 0	10 6	10 0	10 0
Earthnut Cake, decorticated ...	9 3	—	8 9	9 0	—	9 0	9 6	9 6	9 3	8 6
Soya Bean Meal (extracted) ...	10 1½	10 0	10 0	10 0	—	11 6	10 0	10 6	10 6	11 0
Fish Meal (60% protein) ...	17 6	17 0	16 6	16 6	—	16 6	17 0	17 6	16 9	16 6
Meat Meal (60% protein) ...	16 6	15 0	14 3	13 6	14 0	16 6	15 6	—	15 0	16 3
Meat and Bone Meal (40% protein) ...	—	10 6	10 0	9 6	—	10 6	9 6	—	—	10 6
Medium Protein Foods :										
Palm Kernel Cake ...	9 0	—	8 6	7 6	—	9 6	—	—	9 0	—
Palm Kernel Meal ...	9 0	9 0	8 6	7 6	—	9 6	—	—	9 0	—
Starchy Foods :										
Maize (whole) ...	6 9	6 9	7 0	6 6	—	7 3	7 0	7 3	7 0	—
Maize Meal ...	7 6	7 3	7 0	7 0	7 3	7 3	7 3	7 3	7 3	7 3
Maize Flaked ...	8 0	7 9	7 6	7 6	7 6	7 9	8 0	7 9	8 0	8 3
Wheat (whole) ...	6 6	6 6	6 0	6 0	7 0	6 0	6 9	7 0	7 0	6 6
Bran, Red ...	7 9	8 0	7 6	7 6	—	8 0	7 6	8 6	8 3	7 9
Bran, White ...	9 0	9 0	8 4½	9 0	9 0	9 0	9 0	9 6	9 9	9 6
Pollard, Brown ...	7 9	7 6	7 0	7 6	—	7 6	7 6	8 0	8 3	7 0
Pollard, White ...	—	8 6	8 0	9 0	8 3	8 0	8 9	8 9	9 0	8 9
Barley Meal ...	7 3	7 6	7 6	7 0	7 3	7 9	7 6	8 0	8 3	8 0
Tapioca Root Flour ...	—	8 0	7 0	6 9	—	—	—	—	—	—
Oats (whole) ...	7 0	7 0	6 6	7 0	6 6	6 3	8 0	7 6	5 6	5 3
Crushed Oats ...	7 6	8 0	7 0	7 6	6 6	6 9	8 6	8 0	7 6	5 9

Non-Concentrates :—The average prices at representative markets at the beginning of April, 1939, were as follows :—Potatoes (Main Crop), 3/7 per cwt.; Upland Hay, 61/2 per ton; Meadow Hay, 46/2 per ton; Oat Straw, 43/2 per ton; Turnips (Swede), 16/3 per ton.

AVERAGE PRICES OF FEEDING STUFFS.

The following table shows the average retail cash prices per cwt. of feeding stuffs at 1st April, 1939, with comparative prices as at the first of the previous month; the costs per unit of protein equivalent and of starch equivalent are also given in respect of each month.

	Protein Equiv- alent	Starch Equiv- alent	Average price per cwt. at		Cost per unit of protein equivalent		Cost per unit of starch equivalent	
			1st April, 1939	1st March, 1939	April	March	April	March
Protein Foods			s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Linseed	18.75	119.2	16 5	16 1	17 6	17 2	2 9	2 8
Crushed linseed	18.75	119.2	17 7	17 4	18 9	18 6	2 11	2 11
Linseed cake (home-made)	24.6	74.0	12 4	12 3	10 0	10 0	3 4	3 4
Linseed cake (foreign)	27.05	74.5	11 3	11 4	8 4	8 5	3 0	3 0
Linseed cake meal	24.6	74.0	11 10	11 10	9 7	9 7	3 2	3 2
Decorticated Cotton cake	34.65	68.4	10 0	9 10	5 9	5 8	2 11	2 11
Decorticated Earthnut cake	41.3	73.0	9 1	9 0	4 5	4 4	2 6	2 6
Extracted Soya bean meal	38.3	64.0	10 5	10 8	5 5	5 7	3 3	3 4
Fish meal (60% protein)	53.0	58.9	16 10	16 6	6 4	6 3	5 9	5 7
Meat meal (60% protein)	55.0	61.0	15 2	15 0	5 6	5 5	5 0	4 11
Meat & Bone meal (40% protein)	36.0	44.0	10 1	9 11	5 7	5 6	4 7	4 6
Medium Protein Foods								
Palm kernel cake	16.95	73.2	8 9	8 6	10 4	10 0	2 5	2 4
Palm kernel meal	16.55	71.3	8 9	8 6	10 7	10 3	2 5	2 5
Starchy Foods								
Maize	7.65	77.6	6 11	7 0	18 1	18 4	1 9	1 10
Maize meal	7.65	77.6	7 3	7 3	18 11	18 11	1 10	1 11
Flaked maize	9.2	84.0	7 10	7 10	17 0	17 0	1 10	1 10
Wheat	9.6	71.6	6 6	6 8	13 7	13 11	1 10	1 10
Red bran	10.0	42.6	7 11	7 8	15 10	15 4	3 9	3 7
White bran	10.0	42.6	9 2	9 0	18 4	18 0	4 4	4 3
Brown Pollard	10.85	56.5	7 7	7 8	14 0	14 2	2 8	2 9
White pollard	10.85	56.5	8 7	8 8	15 10	16 0	3 0	3 1
Barley meal	7.3	71.4	7 7	7 9	20 9	21 3	2 1	2 2
Oats	7.6	59.5	6 7	6 8	17 4	17 7	2 3	2 3
Crushed oats	7.6	59.5	7 4	7 4	19 4	19 4	2 6	2 6
Tapioca root flour	1.2	83.5	7 3	7 5	120 10	123 7	1 9	1 9
Non-concentrates								
Potatoes	0.85	18.5	3 7	2 10 $\frac{1}{2}$	84 4	68 2	3 10 $\frac{1}{2}$	3 13 $\frac{1}{2}$
Turnips (Swede)	0.7	7.3	0 9 $\frac{3}{4}$	0 10 $\frac{1}{2}$	23 3	25 0	2 2 $\frac{3}{4}$	2 4 $\frac{1}{4}$
Upland hay	4.9	29.0	3 0 $\frac{3}{4}$	3 0 $\frac{3}{4}$	12 6	12 6	2 1 $\frac{1}{2}$	2 1 $\frac{1}{2}$
Meadow hay	4.7	37.0	2 3 $\frac{3}{4}$	2 3 $\frac{3}{4}$	9 10	9 10	1 3	1 3
Oat Straw	0.5	21.0	2 2	2 0 $\frac{1}{4}$	86 8	82 6	2 0 $\frac{3}{4}$	1 11 $\frac{1}{2}$

The object of the foregoing tables, besides providing information regarding the prices of feeding stuffs and the trend of prices, is to give purchasers a

guide as to the economic purchase of supplies. It should be understood that the price per ton is not a sound basis on which to judge whether or not a particular food or grade of a particular food is good value for money. The composition of the foods is the only basis on which different grades can be compared. The value of foods of different kinds, but of the same nature in reference to market prices, can also be compared on this basis.

In the case of an artificial manure which supplies only one fertilising ingredient as, for example, sulphate of ammonia, which supplies nitrogen, the cost of the unit of nitrogen at the price charged can be determined quite readily by dividing the price per ton by the percentage of nitrogen in the sample, and the figure thus obtained is the cost of a unit of nitrogen. By this method the most economical source of nitrogen can be ascertained. Similarly, in the cases of phosphatic and potassic manures.

With feeding stuffs, however, the same method cannot be applied to determine comparative values. This is because every feeding stuff contains three important food constituents in varying proportions. These are (1) carbohydrates, (2) oils or fats, and (3) proteins or albuminoids. The carbohydrates comprise a group of substances such as starch, sugar and cellulose. These substances supply heat or energy to the animal, and the surplus goes to form fat. They are the fuel which the animal requires to keep the body "fires" burning. The oils of a feeding stuff are also heat and energy suppliers, and the surplus is stored as fat. The oils are approximately $2\frac{1}{2}$ times more valuable than the carbohydrates as heat and energy producers, but excess in a ration may lower its digestibility and cause digestive troubles. The proteins are the most valuable and most expensive food constituent. They contain nitrogen and are the part of the food from which products which contain protein are chiefly made. Thus the protein products, such as lean meat, milk and eggs, are formed principally from protein, and young, growing animals, dairy cows and laying hens must have an adequate quantity of protein for full growth, development and production.

While all animals require a certain amount of carbohydrates, oils and proteins, the relative amounts depend on the class of stock. For example, a two-year-old fattening bullock requires much less protein than a dairy cow in milk and a fattening chicken less than a laying pullet.

There are wide differences in the composition of the different kinds of feeding stuffs. Some are rich in carbohydrates and, therefore, particularly valuable for fattening purposes. These include oats, maize, barley and wheat, and their products. Others are rich in protein and are valuable for producing flesh, milk and eggs. These include decorticated cotton cake, decorticated earlnut cake, meat meal and soya bean meal.

In the following table the composition of some of the commonly used feeding stuffs is shown—

	Water.	Protein.	Oil.	Carbohydrates.
Non concentrates				
Swede turnips ...	88	1	0.2	9
Potatoes ...	75	2	0.1	21
Cabbage ...	89	1.5	0.5	8
Oat Straw ...	14	4	2	37
Meadow hay ...	10	10	3	45
Pasture grass ...	80	3.5	0.8	10
Fattening Foods				
Crushed oats ...	13	9	6	60
Maize meal ...	12	10	4	70
Barley meal ...	13	12	2	66
Pollard ...	13	15	5	57
Flesh forming foods				
Decorticated Cotton cake ...	9	40	9	26
Decorticated Earthnut cake ...	10	46	7	23
Meat meal ...	11	60	6	—
Soya bean meal ...	11	44	1.5	32

The problem confronting the purchaser of feeding stuffs, who is concerned with the business of getting best value for money, is one which is much more difficult to solve than is the case with artificial fertilisers. There are at least four aspects of the problem to be considered :

- (1) The quality of the different foods offered for sale. This can be determined by reference to the particulars of composition which a seller must give a purchaser in accordance with the Fertilisers and Feeding Stuffs Act.
- (2) The physical condition of the foods, and if fresh or stale.
- (3) The suitability of the foods for the purpose in view.
- (4) The comparative values of the foods at the prices quoted.

The chief concern of this section of the Report is comparative values and, therefore, that aspect of the problem will be considered specifically.

The proteins play a part in the nutrition of the animal which cannot be taken by either carbohydrates or oils. In addition to this, the proteins, carbohydrates and oils have very different values for the production of energy or fat. It therefore follows that the simple procedure of totalling the percentages of these three ingredients and dividing this total into the price per ton in order to obtain a value for a unit of the food-stuff is quite unsound. Various methods have been used to compare the values of different feeding stuffs, but none is completely satisfactory. For practical purposes the least cumbersome is the

method whereby the food-stuffs are placed in groups of similar composition, and the values of the members of each group are then compared by consideration of (a) their protein equivalents, and (b) their starch equivalents. The starch equivalent is the number of pounds of starch which would be required to produce the same amount of "fat" in an animal as 100 pounds of the food-stuff in question. It is essentially a measure of the fat-producing value of the food-stuff. The protein equivalent is the number of pounds of digestible true protein, plus half the number of pounds of non-protein nitrogenous substances such as amides, present in 100 pounds of the foodstuff. It is a measure of the value of the food-stuff to the animal as a source of protein.

By this method all foods can be reduced to comparable standards based on (1) the protein equivalent, and (2) the starch equivalent.

The next stage in comparing values is to determine the cost of a unit of protein equivalent and of starch equivalent in the different foods which are being compared, and to enable the reader to do this the protein and starch equivalent figures for the different foods are given in the table on page 766, and also the cost per unit of protein equivalent and of starch equivalent in each case. These costs have been determined by dividing the protein equivalent figure and the starch equivalent figure, respectively, into the current price per ton, and the lower the quotient figures thus obtained the cheaper is the particular food as a source of protein or of starch equivalent as the case may be.

However, it would be quite misleading to compare the cost of a unit of protein equivalent in a protein food (which is purchased principally for its protein) with the cost of a similar unit in a starchy food. In other words, foods such as maize meal and pollard cannot be compared on the basis of cost of protein equivalent with foods such as decorticated cotton cake and meat meal.

The best course to adopt is to consider for what purpose the particular food is required, decide what foods are suitable for that purpose, examine the samples of these different foods which are offered and, if all appear to be satisfactory, apply the unit value system of determining which one provides protein equivalent or starch equivalent at the cheapest rate. A few examples may be helpful in explaining the procedure.

- (1) Suppose it is intended to purchase a protein food for the purpose of balancing a ration for dairy cows. The protein foods suitable for dairy cows are decorticated cotton cake, decorticated earthnut cake and soya bean meal. From the table on page 766 it is seen that at the current average prices of these foods the cost of the unit of protein equivalent in each is as follows:—

Decorticated cotton cake	...	...	5/9d.
Decorticated earthnut cake	...	...	4/5d.
Soya bean meal	...	...	5/5d.

Accordingly, decorticated earthnut cake is the cheapest source of protein.

- (2) A protein food is required as a milk substitute to balance the ration for fattening pigs. The foods suitable for this purpose are soya bean meal, meat meal and meat and bone meal. Referring again to the table, it is seen that at the current average prices of these foods the cost of the unit of protein equivalent in each is as follows:—

Soya bean meal	...	...	5/5d.
Meat meal (60% protein)	...	...	5/6d.
Meat and bone meal (40% protein)	...	...	5/7d.

This shows that at the respective prices per ton ruling at present, all three supply protein at about the same cost. It should be noted, however, that in the case of meat meal and meat and bone meal, the former should be used in preference to the latter, since 1 cwt. of it in the meal mixture will provide as much protein as $1\frac{1}{2}$ cwt. of the latter. Besides, having usually a lower content of oil than the 40% protein grade, the 60% meat meal is likely to prove more satisfactory than the lower grade, both from the thriving point of view and as regards producing bacon of good quality. The use of the lower grade of meat and bone meal in mixtures for the feeding of pigs is not recommended.

- (3) Whether is it more economical to feed white pollard than brown pollard or white bran than red bran, even though the prices per ton of the white grades are higher than those of the brown or red grades? The figures in the table show that the cost of both the unit of protein equivalent and of starch equivalent is less for the brown pollard than the white, and less for the red than the white bran. It follows, therefore, that at current prices the coloured grades of pollard and bran are cheaper than the white grades. It should be remembered in this connection, however, that the comparison of costs in these cases has been made on the assumption that the composition of the coloured grades is the same as that of the white grades. A pollard containing say, 8 per cent. fibre, even if of a white colour, would have a far lower feeding value than one containing only 4 per cent. of fibre. Colour is not a guide as to the feeding value of pollard or bran.

PRICES OF FERTILISERS AT SPECIFIED CENTRES.

The following table shows the retail cash prices per ton of fertilisers at 1st April, 1939, at representative centres in Northern Ireland.

	Belfast	Londonderry	Antrim	Armagh	Ballymena	Banbridge	Cole- rairie	Dun- gannon	Ennis- killen	Omagh	Strabane
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Nitrogenous Manures :											
Nitrate of Soda (15.5% N.) ...	8 0 0	8 0 0	8 10 0	9 10 0	—	8 5 0	9 0 0	9 0 0	8 15 0	8 10 0	8 10 0
Sulphate of Ammonia (20.6% N.) ...	7 14 0	7 14 0	8 0 0	8 0 0	8 0 0	7 15 0	7 15 0	8 0 0	8 5 0	8 0 0	8 10 0
Nitro Chalk (15.5% N.)	7 10 6	7 10 6	8 5 0	—	—	7 17 6	8 10 0	9 0 0	8 10 0	8 10 0	8 12 6
Phosphatic Manures :											
Superphosphate (16% S.P.A.) ...	3 13 9	3 16 3	3 15 0	3 15 0	3 15 0	3 12 6	3 15 0	4 0 0	3 18 6	4 1 3	4 0 0
Semsol (5% S.P.A., 15½% P.A.)	2 17 6	3 5 0	3 10 0	3 10 0	3 5 0	3 5 0	3 10 0	3 10 0	3 10 0	3 11 3	3 10 0
*Basic Slag (16% to 17% P.A.) ...	2 18 0	2 18 0	—	—	—	—	—	—	—	—	—
*Basic Slag (18% to 20% P.A.) ...	3 6 0	3 6 0	—	—	—	—	—	—	—	—	—
Gafsa Rock Phosphate (26% P.A.) ...	2 10 0	3 0 0	3 10 0	3 2 6	3 0 0	2 17 6	3 5 0	3 5 0	3 5 0	3 2 6	3 5 0
Potash Manures :											
Kainit (14% P.) ...	3 0 0	3 5 0	—	—	—	3 10 0	3 12 6	3 15 0	3 13 6	3 12 6	3 10 0
Potash Salts (20% P.) ...	4 0 0	—	4 7 6	—	4 7 6	4 7 6	4 10 0	4 10 0	4 10 0	4 10 0	4 10 0
Potash Salts (30% P.) ...	5 5 0	5 11 3	5 15 0	5 15 0	5 12 6	5 15 0	5 15 0	6 0 0	5 15 0	5 15 0	5 17 6
Muriate of Potash (50% P.) ...	8 10 0	—	8 17 6	9 0 0	8 17 6	8 15 0	8 10 0	9 0 0	9 7 6	9 0 0	9 0 0
Agricultural Salt	3 10 0	—	—	2 0 0	2 10 0	2 0 0	—	3 0 0	2 0 0	—	3 0 0

Abbreviations : N.—Nitrogen. S.P.A.—Soluble Phosphoric Acid. P.A.—Phosphoric Acid. P.—Potash.

*If obtained under the Land Fertility Scheme, the price of British made basic slag will be 25 per cent. less than the figures quoted, since a subsidy equivalent to one-quarter is payable. The prices for British basic slag, c.i.f. Belfast and Londonderry, are fixed by the Land Fertility Committee and are the same at both these ports. The retail prices at Belfast and Londonderry given above are based on these c.i.f. prices plus the charges approved by the Committee for unloading and distribution. The cost at other centres can be ascertained by adding the cost of carriage from the port to the prices at Belfast or Londonderry.

The cost of the unit of fertilising ingredient is determined by dividing the price per ton by the percentage of the ingredient contained in the manure, and this method of determining values is the only sound basis on which two different manures or two grades of the same manure, supplying the same fertilising ingredient, can be compared. The price per ton is not a reliable guide as to which is the better value for money. For example, at the prices ruling at Belfast for the various manures, as shown on the table on page 771, the costs of the units of the fertilising ingredients are as follow:—

Nitrate of Soda (15.5% N.)	...	...	10/3½	(Nitrogen)
Sulphate of Ammonia (20.6% N.)	...	...	7/6½	"
Nitro Chalk (15.5% N.)	...	...	9/8½	"
Superphosphate (16% S.P.A.)	...	...	4/7½	(Phosphoric Acid)
Semsol (5% S.P.A., 15½% P.A.)	...	...	2/9½	"
Basic Slag (16% P.A.)	...	...	3/7½	"
Basic Slag (19% P.A.)	...	...	3/5½	"
Gafsa Rock Phosphate (26% P.A.)	...	...	1/11	"
Kainit (14% P.)	...	...	4/3½	(Potash)
Potash Salts (20% P.)	...	...	4/-	"
Potash Salts (30% P.)	...	...	3/6	"
Muriate of Potash (50% P.)	...	...	3/4½	"

It is seen that the price of 14% Kainit is £3 0s. 0d. per ton, and of 30% Potash Salts is £5 5s. 0d. per ton, and it might be concluded that the Kainit was the better value for money. This is not so. The 30% Potash Salts contains more than twice as much Potash as the Kainit, and is, therefore, a cheaper source of potash when the price is even double that at which Kainit is offered. The cost of a unit of potash in the 30% Potash Salts is seen to be only 3/6d., whereas the cost of a unit of potash in Kainit is 4/3½d. At the prices ruling for these manures, 30% Potash Salts is, therefore, better value for money than Kainit. Similarly, it is seen that at the prices prevailing at Belfast, Gafsa Rock Phosphate is the cheapest source of phosphoric acid and Sulphate of Ammonia is the cheapest source of Nitrogen.

In connection with the costs of the units of phosphoric acid, as shown in the above table, it should be noted that in the case of Superphosphate, the cost is that of a unit of soluble phosphoric acid: whereas in the cases of Basic Slag, Semsol, and Gafsa Rock Phosphate, the figures represent the cost of a unit of insoluble phosphoric acid. It would not, therefore, be correct to compare the unit price of the phosphoric acid in Superphosphate with those of the phosphoric acid in the other three. It should also be noted that the costs of the units of phosphoric acid in basic slag will be less than the figures shown above, if that manure is purchased under the terms of the Land Fertility Scheme.

PRICES OF AGRICULTURAL SEEDS.

The following table shows the average retail cash prices of seeds at 1st April, 1939, with comparative figures for the corresponding date in 1938 and 1937.

				1939		1938		1937	
				s.	d.	s.	d.	s.	d.
Corn (Seed) :									
Wheat (Irish grown)	...	...	per cwt.	*14	0	13	3	11	0
" (imported)	...	...	"	10	6	15	6	15	0
Oats (Irish grown)	...	...	"	8	9½	10	4½	10	2
" (imported)	...	...	"	10	9	12	5	13	6
Barley (Irish grown)	...	...	"	11	0	13	2	12	1
" (imported)	...	...	"	15	9	14	6	14	8
Root and Green Crops (Seed) :									
Turnips (Swede)	...	...	per lb.	2	1	1	11	2	8
" (Aberdeen)	...	...	"	1	5½	1	5	1	8
Mangels	...	...	"	1	4½	1	1	1	6
Carrots	...	...	"	4	7½	5	0	4	0
Parsnips	...	...	"	2	11	2	8	1	7½
Rape	...	...	"	0	6¼	0	6	0	7
Clover Seeds :									
Broad Red	...	...	"	0	11½	0	11½	1	0½
Late-flowering Red	...	...	"	1	8½	1	7	1	8
White	...	...	"	2	2¼	1	7½	1	3½
Wild White (Kentish)	...	...	"	5	5	5	10	8	0
Alsike	...	...	"	1	0½	1	6	1	3
Flax Seed :									
Commercial :									
Dutch	...	Per bag of 13 to 14 stones		31	3	49	0	43	9
Pure Line Blue-flowering Varieties :									
Stormont Cirrus	...	per cwt.		45	0	60	0	75	0
Stormont Gossamer	...	"		42	6	63	4	75	0
Liral Monarch	...	"		43	5	61	6	75	0
Liral Dominion	...	"		52	10	62	6	75	0
Liral Crown	...	"		51	6	65	0	75	0
J. W. S.	...	"		—		35	10	43	4
White-flowering Concurrent	...	"		35	0	34	8	40	4
Grass Seeds :									
Irish Perennial 28 lb. to bushel	...	per bushel		8	6	4	11	7	3
26 lb. "	...	"		8	2	4	7	6	0
Scots Perennial 28 lb. to bushel	...	"		10	1½	5	11	8	8
26 lb. "	...	"		10	7½	5	3	8	0
Irish Italian 22 lb. to bushel	...	"		6	11	4	4	5	2
French Italian 22 lb. to bushel	...	"		8	0	5	2	6	6
Cocksfoot	...	per lb.		1	0	0	10	0	8½
Meadow Fescue	...	"		0	9½	0	7½	0	10
Timothy	...	"		0	6½	0	6½	0	7
Crested Dogstail	...	"		1	10½	1	3	1	9
Rough-stalked Meadow Grass	...	"		2	1½	1	10½	2	1
Potatoes :									
British Queen	...	per cwt.		8	9	5	6	7	0
Arran Victory	}	...		3/3 to 6/-	2/6 to 4/-	4/- to 6/-			
Kerr's Pink		...							
Up-to-Date		...							

* This figure represents the average price for small lots at two centres only.

TRADE AND PRICES OF LIVE STOCK AT BELFAST AUCTION MARTS.

Supplies of beef cattle at the Belfast Auction Marts during March were shorter than in the previous month. In the opening week of the month, quality was poor and demand slack, with the result that prices cheapened slightly. In the succeeding weeks, however, there was a noticeable improvement in the quality and a seasonal rise in prices. Altogether, prices ruled at much higher levels on the month, and the weighted average recorded a rise of 1/3d. at 38/2d. per live cwt. It will be noted from the prices below that the margin of difference between this and last year's figures has narrowed considerably. Price ranges at the end of the month were:—Top quality 41/- to 43/-, with an extreme top of 44/3d. per live cwt. ; good commercial 39/6d. to 41/-; rough and unfinished 38/6d. to 39/6d. per live cwt. The following table shows the average prices of fat cattle during the past five weeks, compared with the corresponding weeks a year ago:—

<i>Week ended</i>	<i>per cwt.</i>	<i>Week ended</i>	<i>per cwt.</i>
11th March, 1939	36/7	12th March, 1938	40/6
18th " "	37/5	19th " "	40/6
25th " "	38/10	26th " "	40/10
1st April, 1939	39/7	2nd April, 1938	41/10
Average for month	38/2	Average for month	40/11
8th April, 1939	40/1	9th April, 1938	42/5

Store cattle were also in smaller supply last month than in February. A keener demand for good strong stores resulted from the more attractive prices ruling for beef cattle, and good clearances were effected all month. Prices were fully 10/- higher than in February.

Dairy cattle supplies were almost up to the level of the previous month, but there was no improvement in the demand, and prices showed a further decline of almost 15/- per head.

Decreased supplies of fat sheep and lambs were in steady to firmer request, and prices finished above previous levels, especially in the case of prime finished lots. New season's lambs came on the market in small numbers near the middle of March, since when they have increased slightly in supply. Prices opened at high levels and eased slightly with more animals becoming available.

Price ranges during each week of the month for fat cows, store cattle, dairy cattle and sheep and lambs, are shown in the table on the next page.

PRICES OF OTHER STOCK AT THE BELFAST AUCTION MARTS.

Description.		Week ended 11-3-39	Week ended 18-3-39	Week ended 25-3-39	Week ended 1-4-39
Fat Cows	...	...	...	...	...
Store Cattle :					
Large Forward Stores	...	...	...	...	...
Younger Stores	...	...	...	...	...
Dairy Cattle :					
Milch Cows	...	...	...	...	...
Springers	...	...	...	...	...
Sheep and Lambs :					
Crossbred and White Ewes	...	...	...	...	...
Blackface Ewes	...	...	...	...	...
Crossbred and White Lambs	...	...	...	...	...
Crossbred and White Hoggets	...	...	...	...	...
Blackface Lambs	...	...	...	...	...
Blackface Hoggets	...	...	...	...	...
Rams	...	...	...	...	...
Spring Lambs	...	...	...	...	...

PRICES OF LIVE STOCK.

Average prices of Live Stock at Fairs during the month of March, 1939.

Date	Fair	Calves (under 9 months)	Store Cattle	Fat Cattle (18 months and over)	Springers		Milch Cows	Fat Lambs (under 12 months)	Fat Sheep (over 2 years)	Young Pigs
					Cows	Heifers				
		Per cwt. Live weight	Per cwt. Live weight	Per cwt. Live weight	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.
1	Londonderry	34/-	34/6 to 40/6	34/-	18 0	11 10	—	—	—	1 6
2	Strabane	35/-	35/- to 36/-	35/-	14 10	—	—	—	—	—
3	Moy	35/-	34/6 to 41/-	35/-	14 15	14 5	14 5	†1 13/6	†1 17	—
7	Omagh	35/-	37/6 to 38/6	35/-	16 5	15 10	15 0	†1 17/6	†1 15	—
8	Crossgar	—	37/- to 39/-	—	16 0	—	14 10	—	—	—
8	Irvinestown	7 1/6	35/6 to 38/-	32/-	14 5	15 0	—	—	*1 12/6	1 17
8	Kilrea	5 17/6	33/- to 39/-	36/-	15 0	17 10	—	—	—	1 7
10	Ballygawley	—	27/6 to 38/6	34/6	14 10	—	13 0	—	†1 17/6	1 17/6
10	Enniskillen	6 2/6	31/- to 36/-	34/-	13 0	13 10	11 10	*1 15	*2 0	1 12/6
13	Limavady	—	34/6 to 41/6	35/-	18 0	16 0	—	—	—	1 7
15	Lisnaskea	5 0	30/- to 36/-	33/6	15 0	15 0	13 10	—	—	1 12
16	Ballynahinch	—	37/- to 39/-	—	17 5	16 0	—	—	—	2 0
16	Ballymoney	7 5	35/- to 38/6	—	17 0	20 0	15 5	—	—	1 15
18	Portadown	5 16	35/- to 38/-	36/6	17 0	16 0	17 0	—	—	8/6
20	Camlough	6 0	36/- to 41/-	36/-	17 10	16 0	14 0	—	—	—
21	Money more	6 17/6	40/- to 44/-	36/-	15 7/6	14 0	13 5	—	—	—
22	Fintona	6 17	38/- to 40/-	35/-	16 0	15 0	14 10	†1 15	—	—
30	Antrim	—	37/- to 40/-	39/-	19 0	—	—	—	†1 15	1 10
31	Castlederg	6 0	37/- to 39/6	37/-	12 0	14 5	—	—	—	1 10
31	Killylea	—	30/- to 39/6	38/6	16 0	—	14 0	†1 16/6	†1 15	1 7/6
1 April	Ballymena	6 7	26/- to 42/6	—	22 0	19 0	19 10	—	†2 2/6	1 13

* Long Wool.

† Downs and Crossbred.

SHIPMENTS OF LIVE STOCK.

Statement showing the shipments of Live Stock from Northern Ireland ports during the following periods :—Months of March, 1939, February, 1939, March, 1938; Three months ended 31st March, 1939, and 31st March, 1938.

PORTS OF :—	CATTLE.					SHEEP.			PIGS.			Horses		
	Fat	Stores	Milch Cows	Springers	Calves	Total	Fat	Stores	Lambs	Total	Fat		Stores	Total
Belfast ...	5,418	10,790	879	26	—	17,113	666	—	3	669	3,071	2	3,073	222
Larne ...	5	1,518	—	—	—	1,523	—	—	—	—	951	160	1,111	25
Londonderry ...	763	7,010	35	48	515	8,371	152	—	—	152	355	—	355	10
Newry ...	24	227	—	—	—	251	—	—	—	—	—	—	—	—
Total, March, 1939 ...	6,210	19,545	914	74	515	27,258	818	—	3	821	4,377	162	4,539	257
Total, February, 1939 ...	6,948	13,755	985	57	316	22,061	1,951	—	—	1,951	3,809	4	3,813	170
Total, March, 1938 ...	5,758	20,201	1,005	65	359	27,388	1,847	—	12	1,859	6,938	179	7,117	235
Total, Three Months ended 31st March, 1939	21,024	45,140	3,156	191	1,060	70,571	7,612	—	3	7,615	13,141	166	13,307	530
Total, Three Months ended 31st March, 1938	16,558	45,636	2,994	175	857	66,220	12,479	—	12	12,491	27,148	537	27,685	600

IMPORTS AND EXPORTS.

Table showing the Imports and Exports through Northern Ireland ports of certain Agricultural Products during the month of February, 1939, and the two months ended 28th February, 1939, with comparative figures for the corresponding periods in 1938. This information also includes trade with Eire across the land boundary.

(These figures are supplied through the courtesy of the Ministry of Commerce and are subject to revision).

COMMODITY.	IMPORTS.			EXPORTS.		
	Month ended 28th February.		Two months ended 28th February.	Month ended 28th February.		Two months ended 28th February.
	1939	1938		1939	1938	
Bacon cwt.	3,054	3,230	6,633	42,291	28,492	74,425
Hams "	868	1,333	1,903	9,921	9,467	21,731
Pork "	134	166	355	3,763	2,837	6,587
Butter "	12,280	14,613	27,509	230	213	318
Eggs gt. hds.	63,367	64,805	98,041	228,599	184,444	368,495
Oat Products (inc. Oatmeal) cwt.	3,915	2,340	5,733	4,734	5,120	10,790
Potatoes tons	611	196	785	*9,435	*21,207	*18,644
Poultry cwt.	313	246	602	11,292	11,475	59,349
Grass Seeds "	601	1,079	2,593	38,560	38,755	67,112
Cream galls.	—	—	—	†22,075	†18,294	†48,979
						†37,343

* These figures represent quantities of potatoes inspected by the Ministry for shipment.

† These figures are compiled from the Monthly Trading Returns supplied by Creameries in Northern Ireland.

ACCOUNT OF TRADE AT FAIRS.

Generally speaking, the supply of store cattle at fairs in Northern Ireland during March was larger than in the previous month, but was still rather short for the time of year. The condition of the stock was below normal, although quality was up to the usual standard. The shortage of keep, both here and across the channel, made buyers very chary about making purchases, and only the best were in demand. Good forward stock were readily sold at unchanged to dearer rates, but, on balance, prices were rather lower than in February.

Fat cattle were in similar supply to a month ago, and generally of fair to good quality. The majority of the cattle were well finished, and large numbers were certified as of the "quality" grade. At most centres demand was good, and prices tended higher. Towards the end of the month the enquiry strengthened further with an accompanying rise in prices.

Dairy cattle registered no improvement in demand or prices last month. Supplies were about the same as during February. Good young cows and heifers met a ready sale at late rates, but many of the animals were of low quality and hard to cash even at cheaper prices.

Supplies of sheep and lambs were on the small side last month, but a good trade was done, anything showing flesh being rapidly bought up at firmer rates. Prices generally were rather better than in February, especially for good well-finished yearling lambs.

Smaller numbers of young pigs were shown at the March fairs. Trade was satisfactory, very good clearances being effected at higher levels than in February.

Demand for brood sows was variable last month, and on the whole rather quiet. Prices recorded little change, and ranged generally from £5 10s. to £10 per head. York and York crosses were again in chief demand at around £7 10s. each.

Table showing the numbers of Live Stock (1) exposed for sale, and (2) sold at 21 fairs in Northern Ireland, during the months of March and February, 1939, and March, 1938.

Description of Live Stock.	March, 1939.		February, 1939.		March, 1938.	
	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.	Number exposed for sale.	Number sold.
Store Cattle ...	7,846	5,301	7,078	4,806	7,755	6,347
Fat Cattle ...	1,444	1,375	1,498	1,430	1,365	1,251
Dairy Cattle ...	1,133	812	1,144	810	1,276	1,054
Sheep ...	263	182	167	114	186	135
Lambs ...	181	101	267	173	118	72
Young Pigs ...	2,716	2,117	3,147	2,474	2,543	2,308

14th April, 1939

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MINISTRY OF AGRICULTURE. **List of Leaflets and other Publications**

AGRICULTURAL EDUCATION.

Leaflet
 No. 60 Advantages of Winter Agricultural Classes.
 Prospectus of Ulster Dairy School.
 Prospectus of North West School.
 Prospectus of Greenmount Agricultural and Horticultural College.
 Scholarships in Agricultural Science.
 Scholarships in Creamery Management.
 Scholarships in Horticulture.

CATTLE.

Leaflet
 No. 54 The Breeding and Rearing of Calves.
 " 5 The Dishorning of Calves.

Circular
 No. 5 Why Pay a Tax on the Horns of Cattle?

Leaflet

No. 19 How to Feed Linseed.
 " 81 The Construction of Cow Houses.
 " 61 The Care and Management of Bulls.
 " 82 White Scour in Calves.
 " 70 Ringworm.
 " 80 Hoose or Husk in Farm Stock.
 " 13 Contagious Abortion in Cattle.
 " 41 Blackleg, Blackquarter or Quarterill.
 " 64 The Destruction of Warble Fly Maggots in Cattle.

Circular

No. 13 The Ox-Warble Fly.
 Guide to the Live Stock Breeding Act (Northern Ireland), 1922.

Leaflet DAIRYING.

No. 16 The Feeding of Dairy Cows.
 " 42 The Purchase of Balanced Rations for Dairy Cows.
 " 36 Advantages of Milk Recording.
 " 39 The Production of Clean Milk.
 " 78 Graded Milk.
 " 77 Licensing of Milk Producers and Distributors.
 " 51 Butter-making on the Farm.
 " 14 Cheese-making on the Farm.

Leaflet POULTRY AND EGGS.

No. 20 The Hatching and Rearing of Chickens.
 " 2 Improvement of Farm Poultry.
 " 3 Feeding for Egg Production.
 " 21 The Uses and Advantages of Portable Poultry Houses.
 " 28 The Construction of a Laying House for Poultry.
 " 29 The Selection and Breeding of Laying Hens.
 " 83 The Care, Management and Feeding of Poultry Breeding Stock.
 " 46 Hints for Winter Egg Production.
 " 57 How to have Eggs of First Quality.
 " 56 Identification of Egg Supplies.
 " 27 How to Keep Eggs Clean.

Talk to Producers

No. 39 Hints on the care and handling of Eggs for Market.

Leaflet

No. 59 Bacillary White Diarrhoea. (Pullorum Disease.)
 " 52 Gapes in Chickens.
 " 31 Coccidiosis in Poultry.
 " 43 Tuberculosis in Poultry.
 " 32 Roup of Poultry (Fowl Pox).
 " 18 Marketing of Dead Poultry.
 " 37 The Raising and Fattening of Turkeys.
 Report on Stormont Egg Laying Test.
 List of Accredited Poultry Farms in Northern Ireland.

Leaflet

PIGS.

No. 45 The Breeding and Rearing of Pigs.
 " 35 The Fattening of Pigs.
 " 69 The Construction of Piggeries.
 " 75 Pig Production and the Pigs Marketing Scheme.

Talk to Producers

No. 41 Feeding of Pigs in Relation to Bacon Quality.

Leaflet

SHEEP.

No. 47 The Care and Management of Sheep.
 " 63 Sheep—Castration, Docking, Foot-Rot and Care of Feet.
 " 23 The Handling and Care of Wool.
 " 24 Fluke in Sheep.

Leaflet

HORSES.

No. 25 The Rearing and Management of Young Horses.
 Register of Premium Stallions in Northern Ireland.

FARM CROPS.

Lists of Growers of Certified Crops of Potatoes.

Leaflet

No. 44 New Varieties of Farm Crops.
 " 7 Potato Trials.
 " 73 The Propagation and Maintenance of Healthy Stocks of Potatoes.
 " 50 Potato Blight.
 " 74 New Pure Strains of Flax.
 " 1 Flax Seed.
 " 22 Leather-jacket Grubs.

Circular

No. 9 Smut in Oats.

Leaflet

No. 84 Lime and Liming.
 " 40 The Laying down and Management of Temporary Pastures.

FRUIT, VEGETABLES AND BEES.

Leaflet

No. 15 Suitable Varieties of Fruit.
 " 34 The Pruning of Apple Trees.
 " 9 The Renovation of Orchards.
 " 33 Spraying Calendar for Apple Orchards.
 " 10 Fruit Tree Pests—Cassid Bugs.
 " 11 Fruit Tree Pests—Aphides and Apple Sucker.
 " 12 Fruit Tree Pests—Caterpillars.
 " 79 The Picking and Storing of Apples.
 " 6 The Packing of Apples in Standard Boxes.
 " 65 The Packing of Apples in Barrels.
 " 49 American Gooseberry Mildew.
 " 68 The Cultivation of Strawberries.
 " 71 The Cultivation of Raspberries.
 " 67 The Cultivation of Vegetables.
 " 17 Home Bottling of Fruits and Vegetables.
 " 76 Acarine (Isle of Wight) Disease of Bees.
 Guide to the Marketing of Fruit Act.

Leaflet

FORESTRY.

No. 62 The Production of Timber on the Farm.
 " 72 Tree Planting for Shelter and Ornament.
 " 85 The Growing of Trees.

Leaflet

WEEDS.

No. 38 The Destruction of Charlock.
 " 55 Destruction of Ragwort or Benweed.

GENERAL.

Circular

No. 8 Basic Slag.
 " 11 Fertilisers and Feeding Stuffs Act—General Summary.
 " 306 Fertilisers and Feeding Stuffs Act, 1926—Revision of Regulations.
 " 10 Purchase of Fertilisers and Feeding Stuffs.

Leaflet

No. 66 Seed Testing Facilities for Traders.
 " 26 Ordnance Survey Maps for Farmers.

Any of the above publications may be obtained free of charge and post free on application to the Secretary, Ministry of Agriculture, Stormont, Belfast.

The following publications can be obtained from His Majesty's Stationery Office, 80 Chichester Street, Belfast, at the prices stated:—

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| (1) The Annual Report of the Ministry of Agriculture for Northern Ireland. | Price, 2/6 net. |
| (2) Annual Report upon the Agricultural Statistics of Northern Ireland. | Price, 2/- net. |
| (3) The Journal of the Ministry of Agriculture for Northern Ireland. | Price, 2/6 net. |
| (4) The Agricultural Output of Northern Ireland, 1925. | Price, 2/6 net. |